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Geo. W. Leonard
THE

INDUSTRIAL RESOURCES, ETC.,

OF THE

SOUTHERN AND WESTERN STATES:

EMBRACING A VIEW OF THEIR

COMMERCE, AGRICULTURE, MANUFACTURES, INTERNAL IMPROVEMENTS;
SLAVE AND FREE LABOR, SLAVERY INSTITUTIONS,
PRODUCTS, ETC., OF THE SOUTH.

Together with

HISTORICAL AND STATISTICAL SKETCHES OF THE DIFFERENT STATES AND CITIES OF
THE UNION—STATISTICS OF THE UNITED STATES COMMERCE AND MANUFACTURES,
FROM THE EARLIEST PERIODS, COMPARED WITH OTHER LEADING POWERS—THE
RESULTS OF THE DIFFERENT CENSUS RETURNS SINCE 1790, AND RETURNS OF THE
CENSUS OF 1850, ON POPULATION, AGRICULTURE AND GENERAL INDUSTRY, ETC.,

WITH AN APPENDIX.

IN THREE VOLUMES.

VOL. II.

BY J. D. B. DE BOW,

PROFESSOR OF POLITICAL ECONOMY, ETC., IN THE UNIVERSITY OF LOUISIANA.

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INDUSTRIAL RESOURCES, ETC.,

OF THE

SOUTHERN AND WESTERN STATES.

MISSISSIPPI RIVER.—ITS SOURCES—MOUTH AND VALLEY—THE BALIZE.—The great central region of America, which extends from the Rocky Mountains to the lakes, and sweeps away to the mouth of the Atchafalaya, and along the shores of the gulf; bounded by a perimeter of two thousand leagues; with an area of a million and a quarter of square miles, a population verging upon that of all the remaining portions of the Union, and a trade demanding access to all the markets of the world; belongs to the history of the generation of men that are now alive, and in the creation of which they have been the moving agents. In comparison, all the marvellous developments of the past sink into nothing; the famed fertility of the Nile, the Scandinavian forests prolific of men, and earning the epithet "cradle of the human race," the overshadowing growth of Rome and Roman power.

It is not for us now to dwell upon the era of savage domain over this empire; the first whisperings of its existence breathed to European ears; the early and romantic adventures to its midst; the marvellous narrations of the early explorers and travellers; their tales of incident and daring; their successes and reverses; the triumphant progress of civilized population beyond all haunts of civilized life; the aboriginal yielding to the stern destiny which decreed him to melt away, a tenant at sufferance only, until the coming of the lord proprietors of the soil.

At the era of the census of 1790, after the American revolution had been won, after sixteen years of American independence, and the adoption of a federal Constitution, nine-tenths of all the people of America were eastward of the Alleghany mountains. Scattering settlements only had passed this great barrier. "Tribes of fierce savages stood opposed, but the destiny of things could not be stayed. During the decennial period of 1790 to 1800 the savages were crushed and settlements greatly extended and population increased, expanding into the central basin."

This central basin includes the western portions of the states of New-York, Pennsylvania, and Virginia, and the whole of Ken-

tucky, Tennessee, Alabama, Mississippi, Louisiana, Arkansas, Missouri, Illinois, Indiana, Ohio, Michigan, Iowa, and Wisconsin.

The population of these vast territories was, in 1800, 482,777, having increased about one and a half per cent. per annum since 1790. In 1810 it amounted to 1,090,158, having doubled in ten years; in 1820, 2,217,464, having doubled again; in 1830, 3,672,569, or about seven to the square mile; in 1840, 5,302,918, or ten to the square mile. In these items the western portions of New-York, Pennsylvania, and Virginia are not included. If they be added for 1840, the total western population may be set down at 7,948,789, or fourteen to the square mile. The following table, prepared by Mr. Darby for the use of government, is computed on the supposition that the decennial increase from 1830 to 1840 has since been preserved:

POPULATION OF THE GREAT CENTRAL BASIN IN 1847.

Western New-York.....	50,600
Western Pennsylvania.....	564,800
Western Virginia.....	222,800
Kentucky.....	834,970
Tennessee.....	857,590
Alabama.....	759,500
Mississippi.....	459,070
Louisiana.....	434,100
Arkansas.....	161,600
Missouri.....	529,000
Illinois.....	867,000
Indiana.....	891,566
Ohio.....	1,862,400
Michigan.....	321,000
*Iowa.....	60,000
*Wisconsin.....	50,000
Total.....	8,925,696

Being about eighteen to the square mile, or one-ninth the density of Great Britain,

* These estimates of Mr. Darby in relation to Iowa and Wisconsin are greatly short of the reality. The census of Wisconsin, taken the present year, shows the total 153,000. Iowa had 43,000 in 1840, and the increase since is estimated at 12,000 a year, making the present population 120,000 at least.

Portugal, Spain, and France. The whole population of the United States at the same period being computed at 21,174,567.

To give any notion of the agricultural wealth of this region would require access to more complete information than any that can be had by us now. The census which was

taken in 1840, whatever its merits, could be of but little practical value, since in the progress of such a country the history of several years is as a century in older communities. We will yet introduce a few facts, if only to stimulate further the reader's investigations.

ESTIMATED AGRICULTURAL PRODUCTS OF THE GREAT WEST, 1845.

	Wheat, bushels.	Oats, bushels.	Corn, bushels.	Potatoes, bushels.	Tobacco, lbs.	Cotton, lbs.	Sugar, lbs.
Kentucky,	4,789,000	13,091,000	54,635,000	1,508,000	63,310,000	1,900,000	2,110,000
Tennessee,	8,340,000	8,625,000	70,283,000	2,256,000	37,149,000	48,000,000	520,000
Alabama,	980,000	1,627,000	16,550,000	1,655,000	341,000	145,000,000	12,000
Mississippi,	875,000	1,169,000	2,167,000	3,040,000	193,000	235,000,000	—
Louisiana,	—	—	8,360,000	1,299,000	—	185,000,000	175,000,000
Arkansas,	2,427,000	436,000	8,350,000	642,000	—	17,000,000	5,000
Missouri,	1,425,000	5,466,000	16,925,000	875,000	13,744,000	200,000	450,000
Illinois,	4,568,000	12,937,000	25,584,000	2,681,000	1,168,000	270,000	600,000
Indiana,	7,044,000	13,902,000	30,823,000	2,680,000	2,590,000	—	8,000,000
Ohio,	13,572,000	24,447,000	67,600,000	4,120,000	7,676,800	—	3,900,000
Michigan,	7,061,000	4,816,000	4,945,000	4,555,000	—	—	3,000,000
Iowa,	793,000	681,000	2,028,000	816,000	—	—	150,000
Wisconsin,	971,000	1,900,000	672,000	936,000	—	—	300,000
Total,	52,432,000	68,336,000	297,306,000	26,095,000	125,962,400	681,670,000	194,047,000

Western New-York, Pennsylvania, and Virginia are also extensive agricultural regions, but it is almost impossible to give the exact amount of their products. Knowing what proportion of these states are included in the valley, and also their gross products, and remembering that the valley is by far the most agricultural, we should add at least four millions bushels wheat, three millions bushels oats, eight millions bushels corn, two and a half millions bushels potatoes, and three millions pounds tobacco, to the gross amount given above.

Mr. Calhoun, in his great Report on the Memphis Convention, kindled with the magnificent theme which was presented before him, a population pressing upon the limits of the Rocky Mountains, a tonnage augmented thirty fold in thirty years, a trade already equalling the whole foreign exports and imports of the United States together, three hundred millions of dollars, and this but in the beginning. "Looking beyond to a not very distant future, when this immense valley, containing within its limits one million two hundred thousand square miles, lying in its whole extent in the temperate zone, and occupying a position midway between the Atlantic and the Pacific oceans, unequalled in fertility and the diversity of its productions, intersected in every direction by the mighty stream, including its tributaries, by which it is drained, and which supply a continuous navigation of upwards of ten thousand miles, with a coast, including both banks, of twice that length, shall be crowded with population, and its resources fully developed, imagination itself is taxed in the attempt to realize the magnitude of its commerce."

The Mississippi river, with its greater and less tributaries draining the whole of this im-

mense country, and conducting its products and its commerce to the highway of nations, is worthy of elaborate consideration. We have designed a few pages upon this head, and suppose there are few topics which could have wider interest with our countrymen, and few with which the world at large have less familiarity. Nature has created nothing upon our continent more stupendous than these waters, and they are as much characteristic of the great American republic as the institutions, the policy, the liberty, which distinguish it from all the nations of earth. Characteristic we say, for there is that in the physical aspect of a country, which, if it does not influence the moral and political condition, is yet discovered to be in harmony with them. Vastness and grandeur in nature cannot be contemplated without elevation of thought and sentiment in nature's offspring. Could one be a craven by the side of Niagara? A slave's fetters might not be riveted on Alpine heights. Man sympathizes with nature, and nature with man; so that Goldsmith uttered but the sentiment of humanity when he exclaimed from wild and elevated prospects,

"———Creation's heir,
The world—the world is mine!"

And first of the Mississippi proper. In 47° 10' N. lat. and 94° 54' W. long. at an elevation of 1,680 feet above the level of the ocean, and at a distance of 2,896 miles, on the summit of the *Hauteurs de Terre*, the dividing ridge from the Red river of the north, a little pool, fed by the gurgling waters of neighboring hills, discharges a tiny rivulet, which, meandering over sand and pebble, dancing in shade and sunbeam, winds on its modest way. In breadth and depth scarce measured by a span, the timid water-course mirrors

nodding wild flowers, and floats forest leaves, a miniature fleet that gentle breezes waft and eddies whirl. Ever and anon it blends with kindred streamlets, and forms at last a minor lake. "From this lake issues a second rivulet, a cradled Hercules, giving promise of the strength of his maturity; for its velocity has increased; it transports the smaller branches of trees; it begins to form sand bars; its bends are more decided, and it subsides again into a third basin, larger than the two preceding. Thus attained renewed vigor, tried its consequence upon an additional length of two or three miles, empties at last into the Lake Itasca."

For the following table of distances and elevations, we are indebted to "Bradford's Notes on the North-west, 1846."

DISTANCES ON THE MISSISSIPPI.

	From Gulf Mexico, Miles.	Altitude, Feet.
New-Orleans, Cathedral and level of its pavement.....	104	10.5
Red River, Island opposite Mouth,	249	76
Natches, Light-house.....	406	86
Yazoo River, Mouth.....	534	—
New-Madrid, Missouri.....	1115	—
Ohio River, north side, Mouth.....	1216	324
St. Louis, garden of the Cathedral,	1390	383
Hindes River, the Mouth.....	1693	—
Fortre du Chien, American Fur Trader's House.....	1933	642
Upper Iowa River.....	1978	—
St. Peter's River, the Mouth.....	2192	744
Falls of St. Anthony, U. S. Cottage,	2300	856
Lake Cass, the Old Trading House,	2755	1402
Itasca Lake, Schoolcraft's Island,	2890	1675
Utmost Sources of the Mississippi, at the summit of the Hauteurs de Terra.....	2998*	1690

The next principal river of the West, and the main tributary or branch of the Mississippi, is the Missouri, a description of which we cannot better give than in the language of the eminent geographer introduced above:

"The springs which give rise to the Missouri are not more than a mile distant from some of the head waters of the Columbia, which flows west into the Pacific ocean. At the distance of 411 miles from the extreme point of the navigation of its head branches, are what are denominated the 'Gates of the Rocky Mountains,' which present a view exceedingly grand. For the distance of 5½ miles the rocks rise perpendicularly from the margin of the river to the height of 1200 feet. The river is compressed to the width of 150 yards, and for the first three miles there is only one spot, and that only of a few yards, on which a man could stand, between the water and the perpendicular ascent of the mountain. At the distance of 110 miles below this, and 521 miles from its source, are

the Great Falls, 2,575 miles above its entrance into the Mississippi. The river descends, by a succession of rapids and falls, 857 feet in about 16½ miles. The lower and greatest fall has a perpendicular pitch of 87 feet; the second of 19 feet; the third of 47 feet; the fourth of 26 feet. Between and below these falls are continual rapids of from 3 to 18 feet descent. These falls, next to those of Niagara, are the grandest on the continent. The course of the river above these falls is northerly: The Yellowstone river, 800 yards wide at its mouth, probably the largest tributary of the Missouri, enters it on the south-west side, 1,216 miles from its navigable source, and about 1,880 miles from its mouth. This river, at the place of junction, is as large as the Missouri. Steamboats ascend to this place, and could go farther by each branch. Chienne river, 400 yards wide at its mouth, enters the Missouri on the south-west side, 1,310 miles from its mouth, in 44° 30' N. latitude. White river, 300 yards wide, enters it on the south-west side, 1,130 miles from its mouth. Big Sioux river, 110 yards wide, enters 853 miles from its mouth, in 42° 48' N. latitude, on the north-east side. Platte river, 600 yards wide at its mouth, enters it on the south-west side, 600 miles from its mouth, in 40° 50' latitude. Kansas river, 233 yards wide at its mouth, enters it on the south-west side, in 39° 5' N. latitude, at the distance of 340 miles from its mouth. Grand river enters it on the north-east side, 240 miles from its mouth, and is 190 yards wide. La Mine river, 70 yards wide, enters it 200 miles from its mouth. Osage river, 397 yards wide at its mouth, enters it on the south-west side, in 38° 31' N. latitude, 133 miles from its mouth. Gasconade river enters it on the south-west side, in 38° 45' N. latitude, 100 miles from its mouth. The Missouri enters Mississippi river 3,096 miles from its source, which, added to 1,253 miles, the distance to the Gulf of Mexico, makes its whole length 4,349 miles;* and it is probably the longest

* The navigable portion of this distance is from the Gulf to the mouth of the Yellowstone river, thirty-three hundred miles. We were under the impression that this was the greatest navigable "inland sea" in the world, but if the Report of Mr Breeze to the Senate on the Railroad to the Pacific be relied upon in all particulars, we have presented to us in Asia a river which overtops ours, and dwarfs it in the comparison. We make an extract: "The Yang-tze-keang has its source in the Peiling Mountains of Thibet. After an immense distance in a southerly direction, it enters the Chinese empire in north latitude about 38°, then it winds its way through the richest parts of China and the most numerous population of any part of the globe, crossing the vast empire, and after having accommodated by its tributaries, its lakes, its vast and numerous windings, its interconnections by canals, almost the entire empire, and after drawing together on the grand canal at Ching-Kyang-foo the vast productions, commerce, and resources of the greater part of this vast empire, gently rolls itself into the ocean in north latitude

* This table on the authority of Nicollet. Schoolcraft makes the whole length three thousand one hundred and sixty miles.

river in the world. Through its whole course, there is no substantial obstruction of the navigation before arriving at the great falls. Its principal tributaries are each navigable from 100 to 800 miles. The alluvial, fertile soil on this stream and its tributaries is not very broad, and back of this are prairies of vast extent. Through the greater part of its course the Missouri is a rapid and turbid stream, and in the upper part of its course, flows through an arid and sterile country. It is over half a mile wide at its mouth, and through a greater part of its course it is wider. Notwithstanding it drains such an extensive country, and receives so many large tributaries, at certain seasons it is shallow, hardly affording sufficient water for steamboat navigation, owing to its passing through a dry and open country, and being subject to extensive evaporation."

Lastly, let us exhibit a sketch of the Ohio:

"The Ohio is formed by the confluence of Alleghany river from the north, and Monongahela from the south, at Pittsburg, in the western part of Pennsylvania. The Alleghany river rises in Porter county, Pennsylvania, on the west side of the Alleghany mountains, flows into the state of New-York, and returns into Pennsylvania, and is the most important tributary of the Ohio. It is navigable for boats of a hundred tons and of light draft to Olean, Cattaraugus county, New-York, 270 miles from its mouth in the Ohio, 600 feet above the level of the river at Pittsburg, 1,280 feet above the level of the ocean, and 2,500 miles from the Gulf of Mexico. The Monongahela rises in Virginia, and where it unites with the Alleghany, is more than 400 yards wide. It is navigable at a good stage of the water for large boats, 100 miles from its mouth. The Alleghany, though not larger than the Monongahela at the junction, is the more important stream. Immediately below the junction, the Ohio is over 600 yards wide, and is a placid and beautiful stream. At Pittsburg it is 680 feet above tide water; at the mouth of the Muskingum, 541 feet; at the mouth of the Scioto, 464 feet; at Cincinnati, 414 feet; at its mouth in the Mississippi, 300 feet. Its length from Pittsburg to its mouth, according to the Western Pilot, is 959 miles; but the distance in a direct course is about 614 miles. Its average descent is not quite five inches in a mile. The French called it *la belle riviere*, or the beautiful river; but its name, according to Heckewelder, is derived from the Indian word *Ohiopkehanne*, meaning a very white stream, alluding to the white caps with which its surface is covered in a high wind, emitting all but the first part for

the ease of pronunciation. The Ohio, for some distance below Pittsburg, is rapid, and the navigation interrupted at low water by chains of rock extending across the bed of the river. The scenery is exceedingly beautiful, though deficient in grandeur, exhibiting great sameness. The hills, two or three hundred feet high, approach the river and confine it on either side. Their tops have usually a rounded and graceful form, and are covered with the verdure of an almost unbroken forest. Approaching Cincinnati, the scenery becomes still more monotonous. The hills recede from the river, and are less elevated. Heavy forests cover the banks and limit the prospect, but exhibiting a beautiful verdure, and often exuberant with blossoms. The river exhibits the same scenery as we continue to descend it, except that the hills become less bold and rocky. Many villages and farm-houses are passed through the whole course of the river; but as the bottom lands on its immediate margin are liable to be overflowed, the inhabitants prefer to settle a little back from the river, so that the dwellings in view do not correctly exhibit the population in the vicinity. Between Pittsburg and the mouth of the Ohio there are as many as one hundred considerable islands, besides a great number of sand-bars and tow-heads. These last are low, sandy islands, incapable of cultivation, and covered with willows. Some of the islands are of exquisite beauty, and furnish desirable situations for a retired residence. The principal tributaries of the Ohio are the Muskingum, Great Kanawha, Big Sandy, Scioto, Great Miami, Kentucky, Green, Wabash, Cumberland, and Tennessee. The last three are the most important, of which the last is the largest. One remarkable circumstance respecting the Ohio as well as other western rivers is, its great elevations and depressions. In the summer and autumnal months, it often dwindles into a small stream, affording limited facilities for navigation. Among the hills of Pennsylvania and Virginia, it is seen rippling over chains of rock, through which a passage is barely afforded to boats of the lightest burthen. Farther down, sand-bars either extend across the stream or project into the bed of the river. Steamboats are sometimes grounded on the bars, where they are obliged to wait in peril for the periodical rise of the river. The lowest water is generally in the months of July, August, and September. The melting of the snows in the spring, and heavy rains in autumn or winter, fill the river to overflowing, and many of its islands and the bottoms on its margin are covered with water. These rises are generally gradual, and attended with no danger. As the waters rise, trade and navigation are quickened into activity; the largest steamboats, often of 600 tons burthen, now float in security. The average rise

about 31°, just in front of the great city of Chang-hai, the port open for foreign commerce, being in length more than four thousand miles, and navigable even into Tibet."

of the water from low-water mark is 50 feet, but in the year 1832 an extraordinary flood was experienced. The river began to rise early in February, and on the 18th of that month it was 63 feet above low-water mark, and the lower parts of Cincinnati and Covington were flooded. The river here is 1,006 feet wide, and the velocity of the stream at its height $6\frac{1}{2}$ miles per hour. The water discharged by the rise of the river above low water alone, would fill a lake of one square mile in surface, 107 feet deep, in one hour. The surface drained by the Ohio and its numerous tributaries is about 77,000 square miles, and water four inches in depth on this surface would be sufficient to maintain the river at the above height and velocity for fourteen days. Such a flood as this has scarcely been known since the first settlement of the country. There are no considerable falls in the river, excepting at Louisville, Kentucky, where it descends $22\frac{1}{2}$ feet in the course of two miles. Even over these, boats pass in high water. But they have been obviated by a canal around them, which admits of the passage of the largest steamboats. The current of the Ohio is very gentle; at the mean height of the river the current is about three miles an hour, at high water it is more, but at low water not more than two miles. During five or six weeks in the winter, the navigation is obstructed by floating ice. The Ohio and its tributaries have not less than 5,000 miles of navigable waters. The following distances have been derived from the Western Pilot, and are doubtless correct: From Pittsburg to Steubenville, O., is 70 miles; to Wheeling, Va., 92 miles; to Marietta, O., 174 miles; to Gallipolis, O., $264\frac{1}{2}$ miles; to Portsmouth, O., 249 miles; to Maysville, Ky., 397 miles; to Cincinnati, O., $455\frac{1}{2}$ miles; to Lawrenceburg, Ia., $479\frac{1}{2}$ miles; to Louisville, Ky., 587 miles; to New Albany, Ia., 591 miles; to the mouth of the Cumberland river, Ky., 900 miles; mouth of Tennessee river, Ky., $911\frac{1}{2}$ miles; mouth of Ohio, 959 miles."

The free and uninterrupted navigation of these great inland waters must of course be a matter of prime interest to the country. They are to the populous nations on their banks as the ocean itself, over which commerce and not kings preside. No construction of state powers, as contradistinguished from federal, can exclude these arteries of trade from the pale of government regard and protection. They are points of national concern. No state or alliance of states can apply the remedies which their exigencies require. No narrowed views of economy and retrenchment, no prospective expenditure, however vast, could be allowed to deter the legislature of the Union from approaching the solemn act of duty which is involved here.

We have not space at this moment to advert to the various schemes which have been presented and urged for the improvement of this western navigation, but shall be happy on some other occasion to do so. The remaining sheets of our paper will be rather occupied with some reflections upon the "Passes of the Mississippi," which conduct its great waters into the gulf, the proposed methods of improving their depth and navigation, and of securing safety to the immense shipping seeking outlet and egress here.

The mouths of the Mississippi have been undergoing incessant changes so far as our records extend, and we might add, so far as the history of the river can be traced. Old channels have been filling up and new ones forming; at the same time that a continued sedimentary deposit has forced the delta itself continually to encroach upon the sea. The depth of water afforded in these channels has never been equal to the requisitions of commerce, and it is only by dint of the most enormous application of steam power, and ploughing through deep beds of sand, that the largest class of ships are enabled to navigate the channel. Considerable expense is always incurred in this manner, and delays prejudicial to trade. We have known of a ship, the *Coromandel*, in one instance, grounded in the Pass thirty-nine days. Could it be expected otherwise than that these impediments should be greatly detrimental to the interests of the whole valley having this common outlet?

In 1720, of all the *Passes*, the *south* one only was in use. A Report amongst the French Colonial Records, now in Paris, of date about 1780, gives the depth from ten to twelve feet on the bars, varying each year according to the violence of the winds, etc. Another Report by M. Paria gives a depth of seventeen feet to one of the *Passes* which had hitherto been but twelve feet only, and argues that twenty-two feet might be insured by dredge. The employment of two vessels three months in the year was tried during a portion of this time by the West India Company, but it worked badly. "A *flute* was then placed inside of the bar and sunk into eighteen feet by means of wells built for that purpose, inside such vessel, and filled up with water. This vessel was placed close to the bank of the bar for the purpose of receiving the cargoes of vessels that could not cross. It was soon perceived that the *flute*, receiving the whole power of the current, was forcing a passage of twenty-five feet through the *Pass*. The whole matter was immediately communicated to government."

The following sketch represents the mouth of the *Mississippi* in May, 1862, with the quantity of water at various points, the vessels aground, the amount of damage done, etc.:

MOUTH OF THE MISSISSIPPI—SOUTH-WEST PASS.



REPRESENTING THE APPEARANCE OF THE BAR, MAY 16, 1852.

(Scale 500 feet to the Inch.)

Drawn by DAVID D. PORTER, Capt. U. S. N., and commanding Mail Steamship Georgia, and published by order of Committee Chamber of Commerce; Caldwell, Stanton, Owen, Skipwith and Sumner.

VESSELS ON NEW-ORLEANS BAR.

	Cotton			De-				Cotton			De-		
	Tons.	Bales.	Value.	tained.	Tons.	Bales.	Value.	Tons.	Bales.	Value.	tained.	Days.	
Middlesex*	1,430	4,500	\$162,000	40 days	Steamer Georgia....	2,500							
Dandemona....	824	2,180	80,000	25 "	Ship Goodwin.....	600	200	\$20,000	5 days				
Winchester....	1,478	5,000	505,000	88 "	" Montreuil.....	600	1,000	70,000	7 "				
Proctor.....	1,400	4,300	104,000	45 "	" Liberty.....	740	2,000	70,000	5 "				

Add value ships and steamer..... 9,570 21,800 \$716,000

Value of property detained..... \$1,508,000

* The Middlesex and cargo got damaged (by collision) on the bar \$80,000, and returned to repair. Many other vessels than those above were aground at the same time, awaiting a swell from westerly gales.

Examined before the Committee on Commerce of the Legislature, in March, 1846, William D. Talbot, a resident of the Balize for twenty-five years, used the following language:

"The bars at the various Passes change very often. The channels sometimes change two or three times in a season. Occasionally one gale of wind will change the channel. The bars make to seaward every year. The South-west Pass is now the main outlet. It has been so for only three years, as at that time there was as much water in the North-east Pass as in it. The South-east Pass was the main ship channel twenty years ago; there is only about six feet water in that Pass now, and where it was deepest then, there is only a few inches of water at this time. The visible shores of the river have made out into the Gulf two or three miles within his memory. Besides the deposit of mud and sand, which form the bars, there frequently arise bumps or mounds near the channel, which divert its course. These bumps are supposed to be the production of salt springs, and sometimes are formed in a very few days. They sometimes rise four or five feet above the surface of the water. He knew one instance when some brick that were thrown overboard from a vessel outside the bar, in three fathoms water, were raised above the surface by one of these banks, and were taken to the Balize and used in building chimneys. In another instance, an anchor which was lost from a vessel, was lifted out of the water, so that it was taken ashore. About twenty years ago a sloop, used as a lighter, was lost outside the bar in a gale of wind; several years afterwards she was raised by one of these strange formations, and her cargo was taken out of her."

Lieut. Poole, of the United States Engineers, in his Report of February 8, 1847, remarks: "Great changes have taken place in the last fifteen years in this (the South-east) and the North-east Pass, which has been deepening while this has been filling up." It is stated where the island, shown upon sheet No. 3, now is, there was at that period six fathoms water. The process seems to be still going on; the space between this island and Antonio being nearly covered by a shoal, the centre of which is already above water. During a few days that two ships were lying aground on the middle bank of the South-west Pass, in eight feet water, a channel formed between them, through which a ship of sixteen feet draught passed out without obstruction!

The project of deepening or improving these outlets has been for a long time before the general government, and special reports upon the subject prepared by the engineer service after extended surveys.

Three methods have been principally insisted upon, with different degrees of merit and expense:

1st. To deepen by dredging-machines one or two of the Passes.

2d. To close up all but one of them where they leave the river trunk.

3d. To cut a canal from the river to the gulf.

All of these are regarded practicable. Supposing the first and second adopted together, Captain Chase estimates the expense as follows, to give sufficient depth of water:

Dredging N. E. Pass.....	\$160,000
Do. S. W. Pass.....	210,000
	<hr/>
	\$370,000

with an annual subsequent expenditure of \$72,000 more.

Closing the Passes.....	\$214,500
Jette at N. E. Pass.....	100,000
Jette at S. W. ".....	182,500
Contingencies, &c.....	30,000
	<hr/>
	\$527,000

The line of the ship canal is proposed from a point two and a quarter miles below Fort Jackson, and extending seven miles to the shore of the Gulf, and thence by a jetty, 1760 yards to 80 feet water. The canal to be 100 feet wide at top, and thirty feet deep. The cost of this magnificent work is estimated thus:

For the lock and guard work.....	\$300,000
For trunk of the Canal.....	2,669,888
Jetties and Breakwater.....	2,463,996
Channel between.....	3,420,000
Contingencies.....	1,146,671
	<hr/>
	\$10,000,000

Whether this amount be held too vast for an annual commerce departing or entering the river, now of \$100,000,000, is a question we shall not take time to solve. Of the practicability of such a canal there can be no doubt. If we are content to leave unimproved the channel of the river, private enterprise will find a harbor for our commerce at some other point than the levee of New-Orleans. Ship Island may afford such a one for the heaviest tonnage, and a railroad locomotive be substituted for the laborious "tow." The subject of pilotage over the bars of the river has for a long time excited deserved interest in Louisiana, and also in contiguous states. A history of this question would not be out of place here, particularly as from late developments it would hardly seem to be settled.

At the cession of Louisiana to the United States, a monopoly of the pilotage was in the hands of one Ronquille, appointed under the Spanish crown. This man was succeeded by two others, who bought out his establishment, and amassed a fortune in the course of a few years. The duties of these pilots were performed by deputies, common sailors picked up in the city, and the fees allowed were two dollars a foot with certain other perquisites.

The law of 1805 empowered the governor to appoint two or more sufficient persons to be branch pilots. Unlimited competition was the result. The masters and wardens of New-Orleans were constituted a board of examination for pilots.

The Act of 1837, now of force, introduced

a revolution in the system. The governor appoints under it not exceeding fifty branch pilots, who are to be citizens of the United States, and have resided two years in Louisiana; examined by a board of examiners, and recommended by it to the master and wardens of New-Orleans, and by them to the executive. This board of examiners to be from the pilots themselves, and consist of three members. Each pilot to give bond in the sum of one thousand dollars. Deputy pilots are forbidden, and none but a branch pilot shall conduct the business. The rate of pilotage upon all vessels indiscriminately is fixed at \$3.50 per foot, without other charge whatever.

Against this system a protest has been made by the New-Orleans Chamber of Commerce, and a committee of the Legislature charged during last year with the subject, after severe investigation and examination of a large number of witnesses selected from the pilots, the ship and tow-boat captains, ship owners, and merchants, presented a report which lies before us upon the table.

The committee support the present system against those that preceded it or are proposed in its stead, and furnish a beautiful and graphic sketch of the country which has been redeemed under its influence, and of the domestic life and condition of those who are employed in the pilot service. We make no apology for a lengthened extract from the Report, which will give no inadequate notion of the region known as the Balize in the beginning of the present century and now:

"Your committee have ascertained to their entire satisfaction, that every system that had ever been in force in this state, from the cession of Louisiana to the passage of the act of March 13th, 1837, had proved a total failure. Whether as regards the interests of commerce, the advancement of social order, or the bests of morals and civilization, they had one and all fallen short of the ends and purposes of their creation.

"On this point your committee have taken ample and unbroken testimony, without a dissenting voice. The whole evidence shows that, from the existence of the state as a portion of the confederacy, up to the year 1837, the pilot service was negligently performed, and more especially were the persons engaged in it, as a body, a desperate, worthless, reckless class of men. The Balize, during that period, was a scene of barbarous strife and drunken debauch.

"Your committee have been informed by witnesses of unblemished character, who have resided at the Balize, both before and after the passage of the act of 1837, that anterior to that law it was a mere mud bank, whose natural loathsomeness was made more intolerable by the beastly scenes enacted there. Riots and broils were daily exhibitions, and low revelry and debauches the pastimes of

the night. It was a place dangerous to visit: the savageness of man invested the desolation of nature with appalling attributes. The Balize is located upon the margin of the Mississippi, a short distance above the North-east Pass; in front the river flows sullenly; all around is a prairie overgrown with the rank luxuriance of the tropics; the waters of the gulf in daily tides cover the face of the earth round about, many miles; there is not a tree, nor a mound, nor a monument of any sort, unless placed there by the hand of man, to relieve a monotony that oppresses the beholder. The land itself is but a recent acquisition from the ocean, wrenched thence by the great father of rivers. This dreary and inhospitable vision was the first that greeted the stranger approaching our shores from the seaward; and it is appalling to reflect that the character of the people who dwelt there, and held appointments from the state, was yet more savage than the scene that surrounded them, and impressed the mind with ideas of our national qualities, as gloomy as the opinions such a spectacle might inspire of the natural features of our country.

"It was not surprising that your predecessors endeavored to remodel a system, or systems, under which the vestibule of the state was thronged by the worst description of men. Nor is there wanted a reason why they, who approached our shores to find themselves amid a class of men more dangerous than the deep they had escaped, made an outcry against the laws that encouraged or could not repress their outrages. Nor was it possible for a service, requiring sober, discreet, and intelligent men, to be conducted properly by such as spent their lives in daily broils and midnight was-sail.

"The experiments to infuse respectability and character into the pilot service resulted in the act of the 13th March, 1837. The effect of that act the committee will endeavor to explain in as brief a space as possible; and in this connection they will also attempt to point out the peculiar provisions of the law which in their opinion have, more than others, brought about the change that has been so beneficial and apparent.

"Shortly after the passage of the act of 1837, the pilots selected under it formed themselves into an association for their better governance, and the more prompt and efficient discharge of their duties. It will be seen that the act provided that there should be no deputy pilots; every person in the association was, therefore, a full branch pilot, and the equal of his compeers. The immediate effect of this provision was the elevation of the character of the pilots as men. There was no inequality between them—no superiors, no inferiors; every man who had heretofore occupied a subordinate sphere of life was raised in his own esteem. He was no longer a menial;

his responsibilities were increased, and with it his dignity and self-respect.

"The association was founded upon the broadest principles of equal rights. The business of the company was placed under the superintendence and control of a principal and board of directors, or rather executive committee. The by-laws regulating these appointments made them elective by the pilots in commission, and so limited the periods of service, and arranged the terms of re-eligibility, as to secure to each, in his turn, a share in the administration of the affairs of the association. The salutary influences of this system were soon manifested, in a total change in the habits, manners, and morals of the Balize; order succeeded confusion; soberness of living followed the scenes of riot and debauchery before prevalent; and the growth of social amenities rooted out the wild and poisonous weeds which had sprung up in that hot-bed of vice and profligacy.

"Another change more remarkable, but perhaps equally natural, was wrought by the act, in the domestic relations of the pilots. It was a rare thing to see a married woman at the Balize during the existence of the ancient systems, which were overthrown in 1837. Upon the disappearance of stews, lewd resorts, and places of public drinking, more sedate and rational views of life supplanted the savage and guilty notions that had so long swayed the conduct of the pilots; and that provision of the law which made members of their own body a board of examiners, giving to them the right to select their own associates, and in a good measure to purge the Balize of the worthless characters who might otherwise infect it, emboldened them to take wives to themselves, and perfect the reform by adding the claims of domestic connections to the inducement to a well-regulated social organization.

"The change produced by these combined influences upon the morals of the Balize is scarcely credible. It has been snatched like a brand from the burning—a diviner spirit has breathed upon it—a more exalting appreciation of the duties of citizenship has possessed its inhabitants. They have become fathers of families; children have grown up around them, whose prattle awakens other emotions than those that night revels and brawdy songs once stirred within them. Nor do they stop here. They have established a public school to educate these children for the duties of republicans. They have built up a reading room for the improvement of themselves as well. They have established a police there, too, to suppress disorder. The characteristics of the place are peace, order, progress. The abode of vice, lawlessness and profligacy, has been redeemed, and consecrated to the humanizing influences of the age—education, moral culture, and habits of industry, sobriety, and economy.

"The change in the physical features of the Balize is not greatly less obvious than in its moral qualities. A village of comfortable and convenient houses has sprung up like bright exhalations. A narrow strip of ground, fronting neat dwellings, has been wrested from the returning tides. By small additions, such as could be made in the intervals between the claims of duty, they have formed an embankment for the purposes of horticulture. The earth forming this artificial batture has been taken from the depths of the river. It is the product of years of labor. Each residence has a parterre before it; and here the matrons of the Balize and their daughters spend their leisure in beautifying the blasted desolation of nature. A more imposing instance of the power of law, when exerted for the dignity of man—for his protection, for the conservative instincts of our species—can nowhere be found. That there should be now a well-ordered society in this once sink of iniquity; that domestic virtues should hallow the abode of profligacy; that children should be pointed the ways of wisdom, where yet a little while the stern and formed character of men could not resist the force of abasing example; that flowers should be taught to grow upon a waste, where lately a vertical sun and the waters of the ocean held alternate dominion; that religion, peace and order should reign over a spot cursed with inhospitalities, and terrible from the depravity of its inhabitants, is a triumph which the law may boast, which civilization may rejoice over, which the state may claim as all her own.

"In the benefits of these ameliorations, commerce has also participated, for a more intelligent class of persons are brought to its assistance. It is in proof that the pilot service has been better conducted since 1837 than it ever was before—a proposition which scarcely required proof, unless it were doubtful whether sober, industrious, competent and respectable men are more capable of discharging responsible duties than sots and sea-loafers."

The following facts were elicited from witnesses in the course of examination before the committee:—There are forty-seven pilots now enrolled. The full complement of fifty has almost always been secured. A pilot-boat is ever stationed at the South-west Pass, and cruises southward and eastward; the South-west Pass came into use in 1830, previously the South-east was the main channel; four other boats cruise from the North-east Pass. Boats with five or six pilots remain at sea until they have all taken ships. The gulf coast is extensive and complicated; sun often seen only through fogs faintly for months at a time; pilots guide then by soundings and their knowledge of bottoms. The population of the Balize is 300 to 350. There are at the South-west Pass 60 or 70 more. Mortality

from various causes very great. In eleven years seventy or eighty boat-keepers or pilots have been drowned, killed, or have died. Within thirty-one years every man at the Balise has died—every human being, pilot or not pilot. The Association of Pilots have in their employ ten apprentices, receiving each from twenty-five to thirty dollars per month. The average annual distributable share of each pilot, for the last six or seven years, has been \$1,634 90. The salaries of tow-boat captains reach as high as \$2,000.

The evidence for the good order, faithfulness, decorum, and entire efficiency of the pilot service is unanimous. The Vice President of the Chamber of Commerce, W. L. Hodge, Esq., declared that he was not aware of any neglect, as represented in certain petitions, and that he had refused such petitions when presented to him. The objections of witnesses go to other matters—to the constitution of the Board of Examiners, to the alleged monopoly and excessive rate of charges. The evidence on the last point is various. Some are for maintaining the system as it is, many for a very considerable reduction; nearly all would advocate a reduction on vessels drawing less than ten or twelve feet. The pilots themselves admit the propriety of this last reduction, and advocate it as being more beneficial to themselves as well as to trade. Doubtless the proper modification will be made.

The total expense of pilotage is estimated by Mr. Hodge as one tenth of one per cent. on the whole commerce of the Mississippi with the sea.*

MISSISSIPPI RIVER.—THE GREAT IMPORTANCE OF IMPROVING THE MISSISSIPPI RIVER.—The Mississippi River, taken in connection with the Missouri, is the longest known river on the earth, and, with its tributaries, waters the greatest extent of territory. Yet, large as is the number of the

towns and cities at present upon its banks, whose commercial interests are directly connected with its waters, it is not a hundredth part of what it is one day destined to become; and vast as is the amount of produce from the interior which now descends, and of imports that ascend that river, they are really inconsiderable when compared with the most moderate estimate of the amount that must at some future day find a way to their respective markets along its channel. Being the outlet of an immense valley, and the traveling and commercial thoroughfare of a population increasing beyond all ordinary calculation, whatever affects the permanency of its channel, or general character as a navigable stream, must excite an interest in the minds of all who reside sufficiently near its waters to have their property affected by its overflows, or a change in its channel. These overflows have been of such a character for the last few years, as to spread consternation among those whose agricultural interests lie exposed to their ravages; while the changes evidently taking place in the lower channel of the river have begun to excite alarm in those who see their business and real estates likely to be endangered by their continuance. The agricultural and commercial interests immediately connected with the lower Mississippi, and liable to be affected by its changes, are too vast and important to the general prosperity of the whole country to permit the necessity for its improvement to be much longer overlooked, or the improvement itself to be much longer deferred. People must be blind, indeed, to their interests, and to the consequences which already begin to stare them in the face, much longer to stand with folded arms, indifferent to the condition of a river, the yearly damages from which already amount to millions; and the time cannot be far distant, if want of foresight or reckless indifference to consequences continue to characterize the action of the Legislature of Louisiana, when the river, breaking through its limits, and entirely changing its channel, will so affect present interests in that state as to bring total ruin to many, and leave others no longer possessing any interests capable of being protected by its improvement. Convinced as I am that, when threatened dangers are overlooked, and all prevention neglected, these consequences become inevitable, I feel anxious that those whose interests are so deeply involved in the subject should be fully aroused to a sense of its importance and its danger, and induced to take it up in such a way as to insure the adoption of effective means to save themselves from ruin, and secure the permanent agricultural and commercial prosperity of Louisiana. With this view I now write. I see great danger before the people of that state, which science and experience tell me, if not met by counteracting

* Major Stoddard, who took possession of Louisiana for the United States in 1804, and resided five years afterwards in the state, makes these remarks upon the Balise:

"The Mississippi, near its confluence with the sea, is divided into five branches, and of course has its *embouchure* in the gulf by means of five mouths. These are denominated the North-east, South, South-east, and South-west Passes. They are from three to nine miles in length, and furnish a depth of water for the largest ships except upon the bars. The East Pass, called the Balise, has about seventeen feet of water on the bar, and is the one usually navigated. The South Pass was formerly of equal depth, but is now, 1805 or 1806, gradually filling up. The South-west Pass has from eleven to twelve feet water. The North-east and South-east Passes are traversed only by small craft. On the south side of the East Pass, about three miles from the bar, is the pilot-house, a framed look-out house, about sixty feet high, where several men reside. They make use of row-boats, and seldom venture out to sea except in good weather."

remedies, is inevitable; and I cannot but feel astounded at the ignorance of some, the blindness of others, and the apathy of all. If I succeed in impressing upon their minds the necessity for action, and that action follows, I shall have accomplished a great good; if I fail, I shall at least have performed a duty, the neglect of which I should hold inexcusable.

The Causes of the present Condition of the River.—The condition of the lower Mississippi, its tendency to overflow, the frequent changes in its channel, and consequent threatened dangers, are the result of many causes, among which the following may be considered the principal: the sinuosity of the bed, and the want of uniformity in its breadth. Flowing through an alluvial soil, which, no doubt, was originally formed from the materials brought down by the river itself, it is natural that its bed should be subject to continual change, where change is so easily effected, and where so many causes for change are permitted to exist. The slightest irregularity of the banks, or a deepening or shoaling of the bed on one side or the other, will cause the current to change its previous channel, and, in its efforts to continue the obtained motion in the same direction, and with the same velocity, it will abrade whichever bank interferes with that direction. Thus a curve is commenced, which by degrees becomes more extended by the continual abrasion of the concave bank, while the opposite convex side increases at the same time by deposits of material brought down. Its advance keeping pace with the retreat of the other. The curve continues to progress until the river, in its circuitous sweep, returns towards the point where it commenced, leaving only a narrow isthmus at the neck of the bend, between the channel above and the one below, through which the water during some high flood at last finds its way, and opens for itself a new and more direct bed. This may be called a natural cut-off, being one of those efforts which the river, under the direction of Nature's laws, makes to regulate a defect in its channel. No person can look over the map of the Mississippi River without perceiving that it has frequently exercised this self-regulating power, and, we may say, always to advantage.

Different degrees of density in the soil composing the banks, presenting more or less resistance at different points, will (all other things being equal) have a tendency to produce a similar result; while the same cause, existing in the soil of the bed, will cause such irregularity in the breadth and depth of the channel as to vary materially the velocity of the current in different parts, and thus destroy every thing like permanency and uniformity in the channel. The irregularity in the velocity thus produced by the sinuosity of the bed, and by the want of uniformity in its

breadth, also increases its tendency to overflow. For wherever the velocity is diminished, and the free discharge checked, there must be a greater head of water in time of flood, and consequently an increased danger of inundation.

Such are the evils consequent upon the present condition of the river: from the point where it enters the lower valley to its mouth, it may almost be said to consist of a series of curves. The channel being irregular, the velocity is diminished, and its deposits increased; so that while it apparently retains its usual depth in some parts, in others the bed is evidently rising, and the tendency to overflow, from want of a regular and free discharge of its waters, is increased. There is also a prospect that the present channel may be so filled up as to force the river to open a new passage for itself, and thereby cause the utter ruin of the great commercial interests which have grown up upon its banks.

There are other causes, also, operating upon the Mississippi, which have more or less contributed to its present condition, and continue to exercise an injurious influence upon its channel. Above New-Orleans there are three outlets: the Atchafalaya, Plaquemine, and La Fourche, through which no inconsiderable portion of the water of the main river finds its way in time of flood. These outlets, reaching the gulf by a shorter course, have a greater fall than the main river; and their channels not being so deep, the velocity of their currents is greater at the bottom, consequently they are experiencing a gradual but steadily progressive deepening of their beds, and enlargement of their cross sections. On the other hand, the volume of water in the main river, being diminished by the discharge through these outlets, loses velocity in proportion, while its deposits are increased. Thus the bed of the main river, below these outlets, must experience a gradual and progressive elevation, and while these outlets are clearing out, deepening and enlarging their channels, the Mississippi is gradually filling up. Indeed, such is the effect produced upon the channel of the main river by means of outlets, that, in the passes, where they are numerous, the depth of the channel decreases regularly from their upper entrance to their mouths. The reason is obvious. The volume of water which enters the passes from above is diminished, and the breadth of the bed being extended towards the sea, the velocity is likewise diminished; and the current, no longer able to sweep into the gulf the sedimentary matter which it holds in suspension, or which it carries along at the bottom of the bed, nearly chokes up the mouths of the passes with it. Thus it is, that while there is a depth of over a hundred feet at New-Orleans, there is only twelve at the mouths of the passes; and thus it is that, the free discharge

of the water through the mouths of these passes being impeded, the surface of the river higher up is made to reach a greater elevation in time of a flood than it would if the mouths of the passes were deep enough to admit of a free discharge of water into the gulf. It requires a certain centralized volume of water to keep open the channel of a river, as it acquires a different cross section after the volume of water is diminished, because the river will fashion the size of its bed to the volume of water that remains.

The rapid increase of settlements along the tributaries of the Mississippi, the clearing of the woods, and the cultivation and draining of the lands, by affording a freer and more rapid passage for the waters of the valley into the streams, and carrying along a greater quantity of sedimentary matter, serve to increase still further the tendency to overflow in the main river. For though the quantity of rain that falls throughout the entire valley may not be greater than before, yet much of the impediments in the way of its discharge being removed, and the absorption and evaporation diminished by the increased rapidity of the discharge, the water, after heavy rains, makes its appearance in the main river more speedily and more simultaneously, and it consequently rises to a greater height. This evil, however it may be provided against by an improved condition of the bed of the river, cannot be prevented. On the contrary, it may be expected to increase in proportion as the settlement and cultivation of the lands throughout the Great West continue to progress.

Incident to the condition of the river may be considered the swamps, lagoons or dead lakes interspersed along the low grounds that lie on both sides of the river, throughout much of its length in the lower valley. These act as reservoirs or feeders to the main river. In time of floods much of the surplus water flows into them, and, remaining there until the water in the river begins to fall, returns to the main channel. In this way they tend to equalize the volume of water in the river, preventing it from rising as high in time of flood as it otherwise would, and also from falling too rapidly. The effect which they have upon the condition of the river is beneficial, not only because they check, in some degree, the tendency to overflow, and shorten the time of low water; but also because they serve as repositories for much of the sedimentary matter brought down by the water which otherwise would remain in the river channel.

The Remedy.—Before proceeding to state the remedy for the present evils and threatened dangers, it may be well to lay down a few simple general principles in Hydrodynamics. The velocity of running water depends upon volume, fall, and resistance. When these are uniform, the velocity is always the

same; but, in proportion as the volume and fall are lessened, and the resistance increased, so is the velocity diminished, and *vice versa*. From this arises the fact, that in a straight reach of equal cross sections, where the volume, fall and resistance are uniform, the velocity remains the same; while in a sinuous course of unequal cross sections, where the fall is diminished, the resistance increased, and both constantly varying, though the volume may remain the same, the velocity is not only lessened, but it becomes varied in different parts of the channel. Velocity also varies where uniformity is wanting in the breadth of the bed; being greater where the bed is narrow and deep than where it is wide and shallow. Water in a state of motion is enabled to take up and carry with it the sediment from the bottom of the bed along which it flows; while still water deposits there whatever body heavier than itself may fall into, or be contained in it. The quantity and character of the sediment thus taken up, depends upon the degree of velocity with which the water runs. It requires less to take up alluvial sediment than sand, sand than gravel, and gravel than stones or boulders. Thus the velocity of the current regulates the depth of its bed. Where it is great, the channel is deep, for the current is able to take up the sediment or sand, and carry it along; and where it is languid, the channel is shallow, because the current is not only unable to scour out its bed and keep it deep, but even to carry the sediment brought from those parts of the channel where the velocity is greater, but deposits it along the bed, thus elevating the bottom, and making the river more shallow. From these few simple principles, it is plain that the course of a river should be straight, and its bed of a uniform breadth, or cross sections, whereby a regular velocity may be secured, the discharge of water be performed in the shortest time, and the abrasion of the banks prevented.

In accordance with these principles, the remedy for the evils in the present condition of the Mississippi is as follows:

1st. If a straight course cannot be given to the river, from its too great expense or other local difficulty, it can be made to approximate as nearly as practicable to such a direction of its channel: that is, to alter the present curves, so that those of small radii may be replaced by others of much larger radii; and the angles of incidence be considerably enlarged. This alteration in the course of the river, by diminishing resistance and increasing its fall, would have a tendency to lessen abrasion, and by rendering the velocity more uniform, deepen the channel, remove present shoals, prevent their re-formation, and relieve the river in time of flood by causing a freer discharge of its water.

2d. Establish a uniform cross section be-

tween the principal tributaries and outlets, so as to adapt it to the volume both at high and low water mark. This would aid in accomplishing the result sought for above.

3d. Regulate the width, and centralize the current, by giving the channel such a form that the greatest depth and velocity may be in the middle of the bed, and its least depth and force near its banks and levees. This would prevent abrasion, and secure permanency to the channel.

The old Remedies and their Defects.—In all attempts to remedy the evils arising from the defective condition of the Mississippi, the practice has been to erect new levees, and raise still higher those already in existence, in order to prevent overflows, or assist nature in her efforts to straighten the course by making cut-offs. The state of the river for the last few years shows clearly enough that, while the elevation of the levees may have a temporary effect in confining the water within the channel, it affords no permanent security, and applies no remedy whatever to the causes which are evidently rendering overflows more frequent and more destructive. Indeed, the increased height of levees helps to render the overflows more destructive, when the water, rising still higher, finally breaks through. Because, the volume of water brought down by subsequent floods being either increased in quantity, or having a more elevated surface from the partial filling up of the bed, presses upon the levee with greater weight; and when it does break through, pours from a greater height, and makes its ravages more sudden and widely extended.

Neither has any attention been paid to giving a proper direction to the course of the river, or to make the bed between the levees of such a form as would prevent the injurious action of the current on the banks and levees. So no remedy has been adopted for the bad effects of abrupt curves, or acute angles of incidence, which are the most active causes of irregularity in the bed and abrasion of the banks.

The relative Merits of the different modes of directing the Bed.—A most important point in regulating the course of a river that abrades its banks, and frequently changes its bed, is the proper direction of the channel. But the mode of doing this has given rise to a variety of opinions. One is to give long reaches—long as the country will admit—with the angles of meeting rounded off by curves. This plan, however, is defective, and the defect is in proportion to the fall of the water; for the velocity acquired on the straight reach exercises a powerful and injurious effect on the curve where it meets the resistance of the concave bank, particularly where the curve is of small radius, and the angle of incidence acute. It would render defensive works necessary to protect the con-

cave bank, which must cause great expense, but can prove of but little service. Neither should straight reaches be rejected altogether.

Where the course cannot be made direct, nor curves avoided, straight reaches may be admitted, if of moderate length, with curves of as large radii as possible, to lessen resistance in the curve and the injurious effect of the current on the concave bank. Yet even this is rejected altogether by many, because, in some rivers so regulated, they find curves, angles of incidence, and abrasions. They affirm that irregularities are always produced by this plan, by irregular resistance in the river's bed, and by deposits which vary with every flood; and that, to insure it from all change, defensive works are absolutely necessary throughout its entire length, and on both sides, which would involve heavy expenses; while in curves of small radii the current never abrades the convex bank, and defensive works cannot be needed under any view, save on the concave side.

But such opinions are unsound, and exhibit, on their part who hold them, a great want of good practical judgment and mature reflection.

Although defensive works be only needed on the concave banks, yet, in a river made up of curves of small radii, there must necessarily be far more of them needed than in one of straight reaches of moderate length, connected by large curves.

In the second place, as resistance must always be greatest on the concave side of a river thus made up of curves of small radii, because, the angles of incidence being more acute, the action of the current in the bend is more violent and injurious than in larger curves; so, whatever defensive works be needed, they must be much stronger and more expensive.

Thirdly, the irregularities found in rivers of this kind—namely, of straight moderate reaches with large curves to connect them—arise from the imperfect manner in which this system of improvement has been carried out, rather than in the system itself. For in none of these cases has any attempt been made to give the bed of the river a regular cross section, and thus confine the force of the current to the middle of the channel; the only method by which the banks of the river can be protected from abrasion. It is neither just nor reasonable to urge, or argue against any system, the imperfect manner of carrying it out, the evils of which had been effectually prevented by its proper execution.

The advocates of small curves, with well protected concave banks, seem to believe that bends and angles of incidence cannot be avoided; and are satisfied with attempting to remedy their evils in what they conceive the best manner, and at the least expense. But I am satisfied that they are to be avoided by

straight moderate reaches, and curves of large radii, when the course of the river cannot be made altogether direct; and that it is more consistent with sound policy to remove the causes of irregularity in the bed and abrasions in the banks, than to patch up any remedy for evils consequent on their existence. And I am equally satisfied such a policy will prove the cheapest in the end.

The Principles upon which the proposed System of Improvement is based.—Where the Mississippi runs in straight lines, or in curves of large radii, and where the greatest depth of water occupies the middle of the channel, forming a basin from which the banks on either side rise with a gradual and uniform elevation, we find no abrasion of the banks; consequently, the principles which serve as the base of the proposed system are neither innovations nor mere theoretical ideas, but the results of a simple imitation of the mode which nature, when uninterrupted, adopts to regulate the motion of water. It is an established fact, that in straight canals, where the cross section is formed of a half circle, the greatest velocity is always in the middle, where there is the greatest depth, and consequently the least resistance to motion. It is equally true, that where the banks of a river or a canal rise from the bottom of the bed progressively, with a gradual and uniform elevation, the velocity and action of the current are weakest near the banks, and there exists no apprehension of abrasion. These facts being indisputable, the problem is reduced to finding the means to give, and preserve, to the bed, a proper direction, and a cross section composed of a regular concave form, deepest in the middle, with lateral sides, or banks, rising from the bottom of the bed with a gradual and uniform elevation.

Reasons in favor of the Application of those Principles.—By the adoption of this system of improving the channel of the lower Mississippi, two important effects will be secured.

1st. The middle of the bed being the deepest, the greatest velocity and action of the current will be confined to that part where it can produce no injury; but, on the contrary, prove most useful in deepening the bed, and keeping it clear.

2d. The banks rising from the bottom of the bed in the form of inclined planes, or gentle curves, present the least possible resistance, and, the water nearest them having the least depth and velocity, there can be no abrasions of consequence, and little probability of changes in the channel.

The only difficulty in the application of this system of improvement consists in maintaining the regularity of the proposed profile. The displacement of materials, which always takes place during floods, is generally caused by the irregularities of the present channel,

and is considerable only where there are sudden changes in the fall, or in the direction of the current. These causes would not exist were the channel regulated as proposed; and the higher parts of the banks or batture in front of the levee being covered with a sheet of water of little depth and velocity, the displacement of materials would only occur in the middle of the bed along which they would be carried, rendering the formation of shoals highly improbable; or, if formed at all, they would be of little consequence. And if slight irregularities still remained, caused by abrasions during a flood, they would only acquire a slight depth, which the materials that the current always brings down with it would fill up as soon as the velocity diminished.

Admitting, even in opposition to the advocated opinion, that there would be a considerable transport of materials, they would be almost equally deposited, because the uniform action of a current in a regular channel could not produce irregular effects; so the *régime* of a river could not be sensibly altered. I am well satisfied that the quantity of matters carried along by the current would be much less in the bed if properly regulated, than in its present state. The displacement of the materials forming the bed, which now takes place at every flood, is only due to the sudden changes in the breadth and direction of the current, which are constantly occurring in the present condition of the river. The abrasion of the steep concave banks in the curves of small radii, and that of the bottom caused by the irregularity in the velocity of the stream, provide the greater part of the materials now carried along by the current; while the want of uniformity in the direction and breadth of the bed causes the changes in the extent and height of deposit at the convex sides. In an entirely straight channel, or in one consisting, as before said, of straight reaches of moderate length connected by curves of large radii, of a uniform cross section, and with gradually inclined banks and regular fall, those causes would not exist.

The Mississippi, in its lower course, carries along in suspension small particles of earth, and at its bottom fine sand, which results from the abrasion of its banks, or from the tearing up and wearing away of its bed; while the gravel and *débris* from the upper course of the river and its tributaries, which are found on its lower course, were no doubt deposited there at the time of the great revolutions of the globe. It follows from this, that as soon as we avoid the abrasion of the banks, and the causes of the accumulation of deposits in the channel, there will be little displacement of the materials which compose the bed and banks; then the accumulation of deposits will be prevented, and the *régime* of the river be regular and uniform: for the form of

the proposed bed will effectually prevent the removal of its materials, and the irregularity of the deposit of such sediment and sand as may be brought down from the higher parts of the river, which I am justified in considering the chief evils of its present condition, and the result entirely of those defects which I propose to remedy.

Character of the proposed Improvement.—The special character of the system which I propose for the improvement of the Mississippi River, may be thus stated:

1st. The bottom of the bed will have a concave form, with the greatest depth in the middle, with lateral sides rising progressively towards the top of the banks, so that the current will be completely centralized.

2d. That the action of the current will be strongest in the middle, where it can do no injury; but, on the contrary, be useful in removing all materials which would otherwise be deposited there, and might tend to alter the regularity and uniformity of the cross section.

3d. That the high water cannot reach the levee except over a gentle plane, or slope, covered with grass, which will have a tendency to lessen its action, and thereby prevent abrasion; so that there will be no apprehension of its being broken through, or requiring any important repairs.

4th. That the borders of the bed being thus protected, and secured from the force of the current, and the middle kept deep and clear, the levees will not require to be as high as under the present system, and may be made of common earth, the interior slope being lined with grass; thus combining the least possible resistance to the passage of the water with economy in construction and facility of repair.

5th. That the channel of the river, approximating as nearly as practicable to a straight course, and the main force of the current being confined to the middle, and nowhere washing against the banks, there will be no possibility of the formation of shoals, and scarcely a probability of the existence of snags, or sawyers, to impede navigation or render it dangerous. For such trees as may be brought down from the upper course of the river, or its tributaries, will naturally be carried by the force of the current into the middle of the channel, where the depth and velocity will be greatest, and where they will meet with no impediment to stop or detain them in their onward course to the gulf.

Advantages of the proposed Improvement.—I think that the proposed system for the improvement of the Mississippi River, on account of its special advantages, and its economy, is not only the best, but the only practicable one for permanently regulating the channel and embanking the river; and that when its advantages, and the facility of its

execution, are once confirmed in the public mind by experience, it will afford a model for regulating and embanking such other rivers as may require improvement, and be adopted in preference to any other, with such slight modifications as the peculiar character of each may require. I am convinced that this system, fully and properly carried out, will entirely prevent the too frequent disasters caused by inundation, and secure to navigation a mid-channel of uniform, constant, and sufficient depth everywhere, and at all seasons.

These advantages appear to me to be sufficiently important, and to have enough claim upon public interest, to authorize my asking for this system of improvement, and the reasons upon which it is based, that attention and examination, and the sanction of that approval, which I think they deserve from the well-informed part of the community, who now begin to feel the necessity and importance of improving the course of a river whose inundations cause so many ravages, and whose frequent changes threaten to interfere with the navigation of its channel.

Objections to the proposed Improvement.—The only objection that can be made to the mode of directing the course of the river, and of centralizing the current as proposed, is, that it will require land at some places for a new channel, and at others for extending the breadth of the present bed of the river. But it is certainly better that the planters who reside along its banks, and whose interests are so deeply involved in the future as well as the present condition of the river, should make a voluntary sacrifice of the necessary land, by which a perfect guaranty may be secured for the rest of the delta, than that their plantations should continue to be exposed, as they are at present, to heavy losses every year from inundations caused by the wearing away and breaking through of the levees.

The examination of a system of improvement is often referred to persons who are not thoroughly acquainted with the subject, and who judge of the plan before them according to ancient prejudices and opinions, which are not applicable thereto; and the proposed improvement being unfamiliar to every day's practice, it is rejected, and society deprived of all advantages which may arise from it, or would contribute to the advancement of its commercial and agricultural prosperity. We admit that government ought to be very cautious about adopting a system of improvement suggested by persons who have no experience, and who are unable to give a detailed account of the principles upon which they base them. But propositions brought forward by competent persons, who have had long experience in the practice of their profession, ought to be received with less reserve

and more confidence. Instances are numerous, in which yearly losses have been permitted to continue, until the aggregate amount has gone a hundred fold beyond the expense that would have been sufficient, in the first instance, to prevent them, and in many cases the remedy has come too late to save. The reluctance of governments to undertake the responsibility of new improvements, has deprived some countries of opportunities of national preëminence which time never threw in their way again. Indeed, if a fair estimate could be made, it would be found that the losses consequent upon the refusal to adopt, or the procrastination of new improvements of a public character, have been greater than the actual expense of all that have ever been undertaken, successful or unsuccessful.

The present Defective and Dangerous Condition of the River.—So long as the present condition of the river is permitted to continue, all attempts to remedy the abrasion of its banks, the overflow of its waters, and the damage resulting from them, by mere temporary, or local, improvements—no matter how costly they may be—must prove utterly inefficient. The course of the river must undergo a radical change, and the system of improvement must be of a general, uniform and consistent character, before any real permanent benefit can be derived from the amount of expenditure which the giving way of the levees renders yearly necessary. It is, therefore, the duty of the Legislature of Louisiana to adopt some such system, as by that means only can they hope to remedy the evils consequent upon the present condition of the river; or relieve the agricultural interests along its banks from the heavy losses yearly recurring; or save the commercial and real estate interests from the utter ruin that now threatens them. A heavy responsibility must rest upon each future Legislature of that state, for every neglect to perform so highly important a duty. That the improvements hitherto attempted have proved insufficient to accomplish the end desired, requires no argument: the results speak for themselves. Till now, if the utterly futile efforts to deepen the southwest pass by dredging machines be excepted, all attempts to improve the river have been limited to a few cut-offs, executed without any regard to system, and not even in the proper direction; and of levees erected along the banks at random, without any regular, uniform, or consistent plan. In fact, the river has been left in its natural state, and entirely to the discretion of the planters along its banks. Consequently, the convex banks have steadily increased, in some cases naturally, in others by artificial means used for that purpose; so that the whole current of the river has been thrown with a yearly increased force against the concave banks, and

the tendency to abrasion, change, and overflow, has been yearly increased. This is all that has been done for the river, the result of which has been to increase its already existing defects; while nothing has been attempted in aiding the discharge of the water, so as to reduce its height, or to relieve the levees from its great pressure in time of flood, which is continually wearing them away and breaking through; such as straightening the course of the river, where it could be done by the making of properly directed cut-offs, or altering abrupt curves into those of large radii, or by centralizing the current. The very means used operate against the intended object. To increase the convex banks and the levees, also building new and raising the old, serves but to increase the resistance to the motion of the waters, and add to their accumulation in time of flood, thus making the damage more certain and wide-spread, should a crevasse occur. The great error has been, that all attempts have been made with a view, or at least with the result, of raising the waters by impeding their progress; instead of lowering them, by straightening and regulating the bed in which they run.

Conclusions.—In thus placing my views before the public, my desire is to confer a benefit upon my fellow-citizens of the state of Louisiana, by presenting for their consideration a mode of improving the Mississippi, consisting of a system for regulating and leveeing the channel, which combines that economy and security so indispensably necessary in works of this kind. It needs no argument to prove that the evils arising from the present condition of the river are yearly increasing; and that the time has come when some general and uniform system for the permanent improvement of the channel throughout the whole lower valley ought to be adopted. For the heavy losses and expenses entailed upon the planters by periodical inundations already surpass, in the aggregate, the cost of any system of improvement that may be adopted, however general or extensive it may be. The cost of constructing the levees, even on their present defective system, is a great obstacle in the way of any general improvement of the river, as it must cause expense, which, with the uncertainty of success in the minds of some, may for a time prevent the adoption of my plan. But I feel confident that the people of Louisiana, when they consider how utterly inefficient their present system has proved, notwithstanding its immense consumption of time, labor, and money; and when they compare it with the system I propose, which is simple, comparatively cheap, and entirely in accordance with the laws of nature, they will be compelled to adopt it, even on the principle of economy, as not only the best, but the only means by which the agricultural interests can be secured

from heavy and frequent losses, and their commercial and real estate interests from total ruin.

If this system of improvement be adopted by the Legislature, I have no hesitation in declaring my entire confidence that the result will fully establish all that can be claimed for it. Overflows will cease; the channel will become uniform and permanent; its navigation will be secure and uninterrupted in low water as well as in time of a flood; and the agricultural, commercial, and real estate interests along the river banks will no longer be exposed to heavy losses, or threatened danger.

The great size of the lower Mississippi, the extent of territory through which it flows, and the vast and important interests which have grown into existence upon its borders, and now lie exposed to the ravages of inundations, render it utterly impossible that its power can be controlled, and its defects remedied, through the means of individual energy or individual capital. The improvement of the river must be the work of that government whose people are the most deeply interested in its accomplishment; and upon the Legislature of that state must devolve the highly important duty of selecting and adopting the mode in which it shall be carried out. They can no longer neglect this duty in justice to themselves, for many of them are sufferers by the present condition of the river, and personally interested in the matter; nor in justice to the whole state, whose every prosperity is involved in it. For the manner in which they may undertake to discharge this duty, they will incur a heavy responsibility; but should they neglect or refuse it altogether, they will prove themselves to be as blind to the experience of the past as deaf to the warnings of the future.—*Albert Stein.*

MISSISSIPPI RIVER.—DEPOSITS AND CHANGES AT ITS MOUTH.—We have been presented by Professor Riddell, at our solicitation, with the manuscripts of the Report prepared by him to be read before the Society of American Geologists, and a letter furnished by him to Professor Lyell upon the subject of the sedimentary deposits of the Mississippi. We regard the subject as of deep interest and importance, both as a matter of scientific research and of practical utility. The changes going on at the mouth of the Mississippi cannot be unimportant to our commerce. The remark has been made by some one, that in a remote age our shipping will leave the river on entering the ocean somewhere between

Florida and the West Indies; and that is practically even now the real mouth of the Mississippi. But however this may be, we publish the investigations of Professor Riddell, which have not yet appeared in print.

To the Association of American Geologists and Naturalists:

GENTLEMEN:—At your convention in 1845, you named me as one of the committee of three, to ascertain the amount of sediment carried into the sea by the Mississippi River; the result to be reported to you in 1846. The other members of the committee residing at a distance, I have been unable to profit by such a coöperation with them as would be desirable. What I can present you, will be mostly my individual observations, as yet necessarily incomplete, inasmuch as they extend through only a part of the year. I am of the opinion, however, that the general average amount of sediment, the year through, and one year with another, will not be found to vary essentially from the mean result which my observations give.

The following table embraces the results of experiments upon Mississippi water, taken at intervals of three days, extending from May 21 to August 13, 1846. The water was drawn up in a pail from a wharf near the mint, where there is considerable current. Its temperature was observed at the time, and the height of the river determined. Some minutes afterward, the pail of water was agitated, and two samples of one pint each measured out. The glass pint measure was graduated by weighing into it at 60° Fahr. 7295.581 grains of distilled water, and marking the height with a diamond.

From the pint samples of water, after standing a day or two, most of the matter mechanically suspended would subside to the bottom of the containing vessels. Near two thirds of the clear supernatant liquid was next decanted, while the remaining water, along with the sediment, was in each instance poured upon a double filter, the two parts of which had previously been adjusted to be of equal weight. The filters were numbered and laid aside, and ultimately dried in the sunshine under like circumstances, in two parcels, one embracing the experiments from May 21st to July 15th; the other from July 17th to August 13th. The difference in weight between the two parts of each double filter was then carefully ascertained, and as to the inner filter alone the sediment was attached, its excess of weight indicated the amount of sediment. I employed Mr. John Chandler, a skilful manipulator, to assist me in all these operations.

Date of Experiment.	Height of river above low water.	Temperature.	Grains sediment in pint water.
1846.	ft. in.		A. B.
May 21....	10 11	72°	6.66 7.00
" 25....	10 11	73	9.08 9.12
" 27....	10 10	73	7.80 9.00
" 29....	11 0	74	7.80 8.10
June 2....	11 1	75	4.80 5.45
" 4....	11 1	75	7.87 6.10
" 6....	11 4	75	4.60 4.90
" 8....	11 4	75.5	5.48 5.60
" 10....	10 4	76	6.70 6.80
" 12....	10 8	76	6.50 6.30
" 14....	10 5	76.5	6.00 6.00
" 16....	10 4	76.5	6.47 6.15
" 20....	10 4	77	7.08 7.40
" 22....	10 2	77	9.88 9.00
" 24....	9 8	77	8.40 8.48
" 26....	8 9	77.5	8.25 8.78
" 28....	8 0	79	9.10 9.58
July 1....	7 2	79.5	9.15 9.25
" 3....	7 2	79.5	9.68 10.00
" 6....	6 2	81	8.20 7.57
" 8....	6 0	81	7.30 6.96
" 10....	6 1	81	6.12 6.28
" 13....	5 9	82	7.72 7.30
" 15....	5 10	82	6.67 6.80
" 17....	5 10	82	4.65 4.57
" 20....	5 4	82	6.07 5.75
" 24....	8 10	84	5.76 5.72
" 27....	8 1	84	4.77 4.60
" 29....	8 11	84.5	4.28 4.13
Aug. 1....	2 6	85	4.40 4.44
" 3....	2 0	84	3.18 3.34
" 5....	1 9	83	3.56 3.40
" 7....	1 5	83	2.85 2.85
" 10....	1 6	88	3.08 2.92
" 18....	2 3	84	2.97 3.00

The mean average of column A is...6.32 grs.

" " " " B is...6.80 "

By repeated trials in the first week in July, by direct and careful comparison with distilled water, the specific gravity of the filtered river water was found to be 1.00025; consequently a pint of such water at 60° weighs 7297.404 grains. Thence by weight, the ratio of the sediment to the water is as 1 to 1158.3.

In the months of June and July, 1843, I made several experiments after a different manner, and obtained an average of $\frac{1}{1346}$ for the proportion of sediment, being less than the above by nearly one fourteenth part of the whole. The proportion 1 to 1155 is probably nearest the truth, as it is based upon experiments embracing the most usual average variation of 10 feet in the stage of water.

We have no direct information as to the full depth of the delta formation about New-Orleans. The deepest boring that I have

heard of extended 200 feet below the level of the sea. M. W. Hoffman, Esq., an intelligent lawyer of this city, informs me that in May and June, 1828, he daily witnessed the progress of this boring at the old fort, near the mouth of the bayou St. John, on the shore of Lake Pontchartrain, a few miles north of the city. Harvey Elkins, then proprietor of the hotel, bored to the depth of 207 feet, in search of pure water. He desisted because the auger broke. A copious supply of water arose, with occasional evolutions of gas; the quality of the water being brackish, like that of the wells in the city. Some few recent fossils were occasionally brought up, such as shells, crustacea, bones, and part of a deer's horn. Indian pottery was found at the depth of 80 feet. The strata perforated were all of the delta formation, the lowest being a hard blue, silicious clay, like that now found at the bottom of the Mississippi river.

As to the quality of New-Orleans well water, alluded to above, it will be proper to quote some observations thereon, made by me in 1837. (Gibson's New-Orleans Directory, 1838, p. 292.) "The proportion of mineral matter dissolved in the water varies in different seasons of the year, it being the greatest after long-continued dry weather, when the wells are lowest. A well at No. 328 Camp street, ten feet in depth, on the 22d of September, yielded by evaporation one part of solid residue to 1200 by weight of water. On the 20th of December, 1 to 1094. This residue is an olive-colored powder, with a sharp taste. Nearly one fourth of it appears to be organic and organized matters, such as the sporules of algae, microscopic animalcules and their ova. One half only of the whole residue can be re-dissolved in water; oxide of iron, carbonate of lime, and the organized matters still retaining the solid condition.

"By chemical reagents I determined the presence of the following substances, which may be regarded as the mineral impurities of the water, viz: carbonic acid, chlorine, lime, oxide of iron, magnesia, and soda."

The saline and other dissolved impurities, contained in the Mississippi river water, doubtless vary very much at different seasons of the year; dependent upon the particular tributary river which happens to have the ascendancy. On the 20th of August, 1846, the solid residue from the evaporation of carefully filtered water was by weight 1 to nearly 10,000 of the water. But I presume the mean proportion the year through would be found considerably less. Besides organic matter, this residue was found to contain chroma, lime, magnesia, soda, carbonic acid, sulphuric acid a trace, oxide of iron a trace. At the ratio of 1 to 10,000, suppose one half to contribute permanently to the saline matters of the ocean, one cubic foot of sea water is derived from every sum of 727 cubic feet of

Mississippi water that runs into the Gulf of Mexico. This is equivalent to the production of 0.043 of a cubic mile of sea water of present density every year, or to a cubic mile of sea water produced in about 23½ years.

With a view to learn the main composition of the Mississippi sediment, Mr. Chandler and myself submitted to careful analysis 100 grains taken the 20th of May, from the river margin, and dried at about 212° Fahr. before weighing. We found

	Grains.
Silica.....	74.16
Alumina.....	9.14
Oxide of iron.....	4.56
Lime.....	2.08
Magnesia.....	1.52
Manganese.....	0.04
Potassa, } not determined.	
Soda, }	
Phosphoric acid.....	0.44
Sulphuric acid.....	0.07
Carbonic acid.....	0.74
Chlorine.....	0.01
Water.....	8.12
Organic matter.....	8.10

Total.....98.97

*Branch Mint, New-Orleans, }
March 5th, 1846.*

PROF. LYELL: Sir:—In accordance with your request, I proceed to make estimates from the best data in my possession, respecting the deposition of sediment from the waters of the Mississippi, and the probable length of time heretofore occupied in the delta formation.

On the 17th of August, 1841, when the Mississippi was about five feet below its average height, I made careful soundings directly across from the mint, where the width is very near one third of a mile. The soundings were made at nearly equal intervals, beginning twelve rods from the wharf, and ending eight rods from the opposite shore, showing the following depths in fathoms, viz.: 11, 13, 13½, 15, 23, 23, 22½, 19, 13½, 10½, 8½.

In July, 1843, I made some careful experiments to determine the amount of sedimentary matter in the Mississippi water, which then possessed about an average degree of turbidness. For each experiment I used near a pint of water, 475.85 grammes Fr. actual weight. The sediment was allowed near ten days for natural subsidence; it was then carefully collected, allowed to dry spontaneously, and when effectually dry, was carefully weighed.

Sediment in Ratio by wt.
grammes. to the whole.

No. 1.—Procured from opposite Randolph, by Dr. Drake, in June, 1843... 0.40....1-1190

Sediment in Ratio by wt.
grammes. to the whole.

No. 2.—Opposite Carthage, June, Dr. Drake..... 0.88....1-1250
No. 3.—Opposite New-Orleans, June, Dr. Drake.. 0.85....1-1350
No. 4.—Opposite New-Orleans, July 6th, 1843... 0.40....1-1190

Average ratio of dry sedimentary matter in numbers 1, 2, 3, 4, to the weight of water and sediment, = near 1-1245.

From the best information which I have obtained, derived principally from C. G. Forshey, Esq., of Vidalia, Engineer, I think the superficial area of the true delta formation of the Mississippi, or below Baton Rouge, where the last bluffs show themselves, may be taken as 15,000 square miles; constituting a region of mean width 75 miles, and mean length 200 miles.

Probably the depth of the alluvion may be set down at one fifth of a mile, by inference from the depth of the Gulf of Mexico.

I will now proceed to make some numerical approximations relevant to the subject.

Width of the river opposite the mint $\frac{1}{3}$ mile = 1,760 feet..... (1)
Mean depth, 100 feet..... (2)
Mean variety of the current per second, say 2 feet..... (3)
Mean amount of sedimentary matter by weight 1-1245, by volume near 1-3000. (4)
(1) \times (2) \times (3) = $1760 \times 106 \times 2 = 852,000$ cubic feet of water passing per second. (5)
(4) \times (5) = $1-3000 \times 852,000 = 117\frac{1}{2}$ cubic feet of earth per second..... (6)
(6) \times sec. in 1 year = $117\frac{1}{2} \times 31,557,600 = 870,275$ and 400 cubic feet of earth borne down by the current in 1 year.. (7)
(7) \div cubic feet of a cubic mile = 025.155 of a cubic mile of earth brought past New-Orleans in 1 year..... (8)
One fifth of a mile \div (8) = 7.95 years occupied in depositing the equivalent of one square mile of delta, as at present rates (9)
(9) \times 15,000 square miles of delta below Baton Rouge = $7.95 \times 15,000 = 119,250$ years occupied in its deposition.

Thus, giving a broad margin for inexact data, the latest formed considerable sum of the earth's dry land surface must have engrossed in its continuous matter and enlargement up to the present time, the round period of one hundred thousand years.

Respectfully, your obedient servant,
J. L. RIDDELL

NOTE BY THE EDITOR.—Professor Lyell having been referred to in the article above, we may remark that there is before us a letter written by him to Professor Riddell, in which he remarks:

"On reading your valuable paper I perceive that you state that the water, when taken for

the experiment, possessed an average degree of turbidness. This may be sufficient if you are equally satisfied that the average quantity of water discharged may be measured by the month you assign for your experiment.

"Perhaps you may fairly say, that in assigning two feet per second, we *underrate* the average velocity, which may more than counterbalance any excess, on the score of volume of water.

"Next, as to one fifth of a mile for average depth of the filled-up space, if this be said by any to be a probable exaggeration, we may remark on the other side, how vast a discharge of mud we have lost by its being carried far beyond the delta into the gulf.

"The bulk of drift wood also ought, perhaps, to be considered."

The late imposing assemblage of the British Scientific Association, over which Sir R. Murchison presides, and to which delegates were accredited from the Emperor of Russia, the Kings of Denmark, Sweden, and Prussia, etc., was the occasion of an address from Professor Lyell, on the *Valley and Delta of the Mississippi*:

"For nearly fifty miles of its extent, that of the Mississippi presents a vast river running nearly parallel with the sea, from which it is separated at particular places by an embankment only half a mile across. The valley is nearly level, there being only a rise of nine feet between the mouth of the river and New-Orleans, a distance of 150 miles; and the inclination is equally trifling still further inland, being never more than six inches in a mile. This uniformity is explained by the fact, that the moment the river reaches its banks it overflows, and so the velocity, which is only four miles an hour, is instantly checked. The debris carried along with the flood is deposited over the surrounding plains, the principal part being left near the bed of the river; the necessary result being, that the banks have been gradually raised to a higher level than the lands adjoining them. This slope, from the river to the interior, is as much as 18 feet in a distance of a few miles. The interior consists of vast swamps covered with trees, the tops alone are visible in the time of floods. Sometimes the inhabitants on the bank of the Ohio or Red River, after making a large raft, on which they prepare to bring all the produce of the year, for 1,300 or 2,000 miles, to the market of New-Orleans, find themselves, near the termination of a journey of some two months, entire weeks of which may have been passed by them aground, waiting for a flood to float them off again, suddenly hurried through one of the openings which the river makes in its banks, at the rate of 10 or 12 miles an hour, and left aground in the midst of a vast morass; where they are obliged to climb a tree for safety, and await the chance of a boat coming to their rescue. Neverthe-

less, the course of the river cannot be permanently altered by these violent torrents, on account of the great depth of the main stream. Respecting the age of this vast formation, some curious points were stated. It appears that the Delta has not, in point of fact, advanced into the sea—notwithstanding all the assertions to the contrary—more than one mile in one hundred or one hundred and twenty years past; the sediment of the water is only 1 in 1,800 by weight, or 1 in 3,000 by volume. The time required for the accumulation of matter found in the Delta and Valley of the Mississippi, must have been 87,000 years; and another 88,000 years must have been required for bringing down to its present position the great deposit above. The larger fossil animals found in the soil of the Valley of the Mississippi are the mastodon, the megatherium, an extinct elephant, an extinct species of horse, some bovine animals, and a kind of tapir. Taking the period which he assigned for the formation of the Delta as a unit, it would be necessary to conceive as many of these units as the unit itself contained years, in order to arrive at the vast antiquity of even the comparatively modern formations beneath it."

MISSISSIPPI BASIN.—For the following, we are indebted to Wm Darby, Esq., in a communication addressed to the Hon. J. C. Calhoun:

The outlines of the Mississippi Basin can only be determined approximately; but, however, with adequate accuracy for all general purposes. Commencing on the Gulf of Mexico, and at the mouth of the Atchafalaya, the subjoined tabular view, taken from the best maps, will serve to show the several parts and perimeter of this great Basin:

	Miles.
Mouth of Atchafalaya, between the sources of streams confluent of the Mississippi Basin, and those of the Gulf of Mexico, to latitude forty degrees in the Rocky Mountains, from whence issue the sources of Platte, Rio Grande, and Colorado rivers.....	1,400
Along Rocky Mountains to sources of Marias river.....	700
Around northern sources of Missouri river, to the head of Red river branch of Assiniboin.....	800
Around the sources of Mississippi proper, to the head of Kankakee branch of Illinois river.....	1,100
Between the confluent of the Canadian sea and those of Ohio, to the extreme source of Alleghany river.....	500
Along the dividing line of water source between the sources of streams flowing towards the Atlantic ocean and those into Ohio river.....	700

Between confluent of Mobile and Tennessee rivers.....	800
Between sources discharged into Mississippi and those of Mobile and Pearl rivers, to the mouth of Mississippi river, 400	
Outlet of Atchafalaya.....	200

Entire outline of Mississippi Basin.....6,100

To estimate, to any very near approach to accuracy, the actual area comprised within this great perimeter, exceeding six thousand miles, is no easy task; but the following care-fully measured sections, geographically and by the river valleys, will exhibit the parts comparatively with each other:

Table of the extent of the Mississippi Basin by lines of latitude.

	Square Miles.
From lat. 45 deg. to 49 deg. N.,	150,000
" 40 deg. to 45 deg. N.,	410,000
" 35 deg. to 40 deg. N.,	520,000
South of latitude 35,	170,000

Entire surface, by rhombs of lat., 1,250,000

The following, from a careful measurement of its great valleys, is the aggregate area of the Mississippi Basin, as given in the third edition of Darby's Geographical Dictionary:

	Square Miles.
Valley of Ohio.....	200,000
Valley of Mississippi proper.....	180,000
Valley of Missouri.....	500,000
Valley of the Lower Mississippi.....	380,000

Aggregate area.....1,210,000

MISSISSIPPI.—EARLY HISTORY.—Of the early discovery of this country, there is no history which, in all its details, can be called authentic. Though not quite so apocryphal as that which narrates the adventures of Jason in search of the golden fleece, or Hercules strangling lions and other monsters, with which Grecian and Roman traditions have entertained mankind, the story of the adventures of De Soto and his companions is, at best, believed only because no more probable or authentic account exists.

The territory now embraced within the limits of the state of Mississippi was a "vast, unbroken, untrodden, magnificent wilderness," save the almost imperceptible traces by which the untutored savages glided from one of their hunting grounds to another, and the few sparse villages which they inhabited, until the year 1540, (310 years ago,) when De Soto, with his followers, numbering about 1,000 mounted men, led on by thirst of conquest and gold, penetrated across the eastern boundary of the state, to that portion of it now called Yallobusha county. They there took possession of several hundred wigwams, which the affrighted Indians abandoned at the approach of this warlike and formidable train. Here they found an abundance of corn, which afforded subsistence

to themselves and their horses during a winter of unusual severity, and fortified themselves against attack from the only quarter which threatened them, as well as the nature of their situation allowed. Well it was for them that they did so: for the Spaniard of that day, with all his chivalry and pride, was but a barbarian and his cruelty and injustice to the native tribes, whom they had driven from their rude but happy homes, soon provoked retaliatory measures from the latter. The Indians attacked their fortifications with such courage and success, that every habitation was burnt, about forty of the Spaniards and their horses killed, their arms and clothing consumed, and indeed almost everything essential to the comfort, subsistence and protection of adventurers, far from their native land, and in the midst of implacable enemies, was destroyed.

The Spaniards were thus forced, temporarily, to adopt another position, which having done, and having repaired their losses so far as ingenuity and labor could accomplish it, they recommenced their march westwardly, and in a few days struck the eastern bank of the Mississippi river. Having here consumed a month in constructing boats, they finally succeeded in landing on the western bank of the river, at a point (as it is supposed) a short distance below Helena, Arkansas. They then penetrated Arkansas in search of gold, as far as the Arkansas river; and at this point, De Soto, having lost about half of his gallant band, and their horses, and being without sufficient provisions for the residue, despairing of the object which had hitherto animated his bosom—the discovery of gold—and dejected and dispirited by all these causes, resolved to return to the bank of the Mississippi river, and there establish a colony, until he could send to Cuba (then occupied by Spain) for ships and a reinforcement of men and arms, with which to take permanent and secure possession of his newly-discovered country, doubtless with the view of founding a mighty and populous empire, with which his memory would for ever be associated. But alas, for ambition—that aspiring quality, "for man's illusion given!" No sooner had De Soto reached the Mississippi river, than he was seized with a fatal disorder, which terminated his life. Before his death, he appointed Luis de Moscoso his successor in command. To prevent the Indians from mutilating his body, his followers excavated a green oak, in which they laid his body. They then nailed a plank over it, and threw it into the river, where it sunk. This occurred in the year 1542.

It would be naturally supposed that the remnant of his band would now desire to return to Cuba; but, although dispirited, they were undismayed, and, under the command of

* De Soto was 42 years of age when he died, and had expended 100,000 ducats in this expedition.—*Hamer's Annals of America*, vol. 1, p. 74.

Muscoso, they wandered for many months among the western wilds, suffering all the misery which want, exposure and danger could inflict, till the year 1543, when the survivors returned again to the Mississippi river, and prepared to leave the country, and by descending the river to the sea, seek a more hospitable land. Having, after several months, constructed a number of large open barks, the sides of which were defended by hides against the Indian arrows, they embarked.

They now numbered about 350 men. They found their way beset by hostile Indians, who, in their light canoes, would pass or run around them, and discharge showers of arrows among them, during several days and nights. At length, weary of submission to this harassing species of warfare, about fifty of the Spaniards manned a pirogue, and boldly sallied out to attack the savages. But all were cut off—not one returned. The remainder, at the end of twenty days, reached the sea, and shortly afterwards arrived at a Spanish town on the coast of Mexico, where they were kindly treated. But adventurers like these are always unfitted, by their peculiar habits of life, for any permanent occupation or home; and from this point they soon dispersed, and wandered whithersoever accident or fortune might lead them. Thus ended the romantic expedition of Fernando de Soto.†

In 1682, (140 years after De Soto's invasion of American territory,) La Salle descended the Mississippi river to the point of its confluence with the Gulf of Mexico, and there took formal possession of the adjacent country, in the name of the King of France, and called it Louisiana.

Ascending the river again, he tarried among the Natchez and Tensas tribes of Indians, and then went to Chickasaw Fort. A short time afterwards he went to France, and in 1684 returned with a colony, bound for the mouth of the Mississippi river; but unfortunately missing the longitude, he landed on the coast of Texas, where, for several years, the unhappy colonists, assailed by various hardships, wasted away, and La Salle himself, not long afterwards, was murdered by some of the discontented and factious survivors.

In 1698, M. d'Iberville was authorized by the French king again to colonize the regions bordering on the lower Mississippi. He landed at Ship Island, off the mouth of Pascagoula river, and erected huts for his colonists. Here he discovered the Biloxi tribe. From this point, setting out in two large barges, he explored the coast, and on the second day of March discovered the mouth of the Mississippi

river. All doubt of the identity of this river with that descended by La Salle was dispersed by discovering, when they reached Bayou Goula, articles left there by the latter in 1682, and also a letter left by De Tonti for La Salle, in 1685. Having visited the mouth of Red river and Manchac, Iberville returned to Ship Island, and erected a fort at the bay of Biloxi, about eighty miles east of New-Orleans. He then embarked for France, leaving the fort in command of his brother, Bienville. In December, 1699, Iberville returned from France, and built a fort soon afterwards on the banks of the Mississippi river.

In 1700, De Tonti, having descended the Mississippi river, arrived at Iberville's fort with a party of Canadian French, from the Illinois. Iberville availed himself of De Tonti's experience and knowledge of the country, to ascend the river and explore its banks, form alliances, &c. He accordingly detailed a party, with De Tonti and Bienville, to ascend in barges and canoes. They ascended as high up as the Natchez country, four hundred miles above the French fort. Here he selected a site for a fort, which, however, was not erected till sixteen years afterwards, and called it Rosalie. A settlement was also made in 1708 on the Yazoo river, which was called St. Peter's.*

In 1704, Iberville died at Havana, leaving the colonists dependent for subsistence on hunting and fishing, and the precarious bounty of the Indians. They did not resort for some years to agriculture, and it may well be supposed how difficult it was to induce men accustomed to this idle but seductive life, to exchange it for agriculture or other regular labor. In 1718, they cultivated small gardens at Biloxi.

In 1716, Bienville built a fort at Natchez—the site which Iberville had selected and called Rosalie, sixteen years before—and left in it a garrison of eighteen men, under M. Paillaux.

The colonies, thus established, grew but slowly. New-Orleans having been soon afterwards founded, and the coast above that city being exceedingly fertile, numerous emigrants were attracted thither, and in 1728, rice, tobacco, and indigo had been produced and exported in considerable quantities.

Unfortunately, at this time, reciprocal ill-will had grown up between the frontier settlements and the neighboring Indians. The consequence was, a conspiracy of several tribes for the purpose of exterminating the whites. The Natchez dispatched runners to the various towns and settlements of the Indians, who distributed quivers full of reeds, each of which contained the same number. It was agreed, that after a certain moon, a reed should be drawn every day from each quiver, and that the day when the last reed was drawn should

† In 1673, Father Marquette, and Joliet, a citizen of Quebec, employed by M. Talon for the Mississippi, entered that noble river on the 17th June, and after descending it until they came within three days' journey of the Gulf of Mexico, they returned towards Canada.—*Holmes's Annals of America*, vol. 1, p. 76.

* The site of St. Peter's is now owned by J. U. Payne, Esq., of New-Orleans, being part of his plantation.

be that of the intended massacre. It is said that an Indian girl, anxious to prevent the destruction of the whites, and especially to save the life of *one* of them, secretly drew several reeds from the quiver which the Natchez tribe possessed, with the view of thus defeating the union of the different tribes on the same day, without which, it was believed by her that no single tribe would make the attack.

But her stratagem only precipitated the catastrophe. On the appointed day, the Natchez, thinking that their allies had faltered, resolved to execute alone the original design contemplated by all. Accordingly, while the whites (though forewarned) were in their houses or fields, dispersed and engaged in their various pursuits, the Indians entered the settlement, and, under the pretense of trading for provisions and ammunition for a great hunt, obtained access to their counting-houses and dwellings, and in an evil hour fell upon them, and massacred them in detail. Every white man in the settlement was murdered, except a carpenter and a tailor, both of whom were spared by the Indians, with the view, on their part, of building houses and making garments for themselves; and also with the exception of two soldiers, who, having been absent on that day hunting, were on their way back to the fort, but perceiving the smoke and flames issuing from the houses, and hearing the yells of the savages, instantly fled, and by various means found their way to New-Orleans, where they announced the terrible calamity which had befallen the garrison at Fort Rosalie.

The women and slaves were preserved as prisoners. The governor, Chapart—who, though frequently admonished of his danger before this massacre, had turned a deaf ear to the advice of his counsellors, and, being of an audacious and reckless character, had even threatened every one with punishment who should communicate any similar intelligence—was the first to pay the forfeit of his temerity. At the same time, the little colony at St. Peter's, on the Yazoo river, and the one at Sicily Island, and a third, near the town of Monroe, shared the same disastrous fate.* For, although the neighboring tribes had been prevented by the stratagem of the Natchez girl from uniting in the massacre at Fort Rosalie, they yet proceeded, on the day which, but for the precipitancy of the Natchez tribe, would have been the time for general coöperation, to massacre all the whites within their reach.

Thus, in the year 1728, in one day, were swept away every vestige of civilization by the Indians, within the limits which now constitute the boundaries of the state of Missis-

sippi. Not less than two hundred persons, who had encountered and survived all the perils and hardships of emigration and a sickly climate, perished in an hour beneath the scalping-knife of the savage.*

The Indians, inflated with success, and glutted with spoil, abandoned themselves, over the collected bones of their victims, to the most intemperate orgies; but in the midst of their prolonged carousing, Lesueur, having obtained the aid of six hundred Choctaw warriors, on the Tombigbee, advanced suddenly upon them, and took sixty scalps, and rescued fifty women and children, and the carpenter and tailor before mentioned, from captivity, besides one hundred and six negro slaves. After this exploit, these Choctaw warriors dispersed without further action. But, in the mean time, Loubois was advancing with a large force from New-Orleans, and the Natchez Indians, learning their approach, ceased from their carousals, and fortified themselves for defense. After a skirmish of seven days, during which the Indians fought desperately, they sent a flag to Loubois, proposing to surrender the remaining French prisoners, numbering two hundred souls, provided the French artillery should be removed, and the siege abandoned; but declaring that a refusal of these terms would be followed by the immediate destruction of all the French prisoners by fire. In order to preserve life, Loubois consented, and negotiations commenced, for which purpose hostilities had been previously suspended for ten days. At length it was agreed that the prisoners should, on the following day, be surrendered, opposite to the fort. But during the night, the Indians, *justly suspecting* treachery on the part of the French, retired from their stronghold with their women and children, and personal effects, and crossed the river. On the next morning the French found the prisoners, but the Indians were beyond their pursuit.

* I have taken the foregoing narrative from Monette's History of the Valley of the Mississippi. In Holme's Annals of America, vol. 1, p. 545, A.D. 179, I find the following account of the Natchez massacre:

"The Natchez, an Indian nation, formed a general conspiracy to massacre the French colonists of Louisiana." (Louisiana then comprehended Natchez.) "M. de Chapart, who commanded the post at Natchez, had been embroiled with the natives, but they so far dissembled as to excite the belief that the French had no allies more faithful than they. The plot having been deeply laid, they appeared in great numbers about the French houses, on the 28th November, telling the people they were going to hunt. They sung, after the custom, in honor of the French commandant and his company. Each having returned to his post, a signal was given, and instantly the general massacre began. Nearly two hundred persons were killed. Of all, not more than twenty French and five or six negroes escaped. One hundred and fifty children, eighty women, and almost as many negroes, were made prisoners. The authority quoted for this is Charlevoix, *Nouv. France*, ii. 465.

* The immediate cause of this massacre was the wresting from the Indians, by the governor, of a fertile tract of land, about six miles below Natchez, for the purpose of bestowing it on — Hutchins, whose venerable descendant now resides on it, and is nearly 80 years of age.

Savages though they were, there is no doubt that the Natchez tribe felt all the sorrow of exiles, in being driven from their delightful home. No one can now ride among the romantic hills of Adams county, or the beautiful valley opposite to Natchez, which constituted the home and hunting ground of the Indians—and which, in their day and generation, abounded with fish and game, as well as the spontaneous growth of many articles essential to their comfort,—without sympathizing with them in the sad destiny by which they were driven from this fair inheritance.

A few days after the expulsion of the Indians from Natchez, M. Loubois erected a terraced fort, of which the high bluff easily admitted, on the banks of the Mississippi, and supplied it with cannon and other munitions of war, and a garrison of one hundred and twenty men. The remains of this fort are still visible, though all traces of the race which founded it, as well as of their language, have been obliterated. But their habits are still exemplified in the lives of some of their descendants, improved by association and amalgamation with a more energetic race; and few towns or neighborhoods exhibit more evidences of the virtues of all races and nations, without the vices of either, than Natchez and the adjacent settlements.

My next number will contain the history of the Natchez tribe, and their allies, after the massacre at Fort Rosalie, and of the territory now composing the state of Mississippi, up to the period when the American flag first floated over it, and converted it from a refuge of the European to the "land of the free and the home of the brave."

WAR OF THE NACHEZ—CHICKASAW WARS—DEFEAT OF BIENVILLE—EARLY HISTORY.—In the first number of this compendious history, we reached the period when Loubois, having driven the Natchez tribe from the eastern shores of the Mississippi river, and having also erected and garrisoned a new fort at Natchez, returned to New-Orleans with the rescued captives, to make fresh preparations for the pursuit and extermination of the fugitive savages. The further prosecution of the war was delayed till the arrival of reinforcements from France. In the mean time the French succeeded in forming alliances with several powerful tribes of Indians inhabiting the south, as well as the Illinois and Wabash regions.

The Natchez, expecting an invasion, fortified themselves, with great skill, at a point on Black river, below the confluence of the Ouachita and Little rivers, near the spot where the town of Trinity now stands.

M. Perrier, by whom the war was to be conducted, having organized all the effective force of the colony—which (inclusive of a reinforcement of 180 soldiers from France) did

not exceed one thousand men—commenced his campaign. Leaving about 200 men to defend the colony at home, he embarked at New-Orleans, and ascended to Black River, with an army numbering little over 700 men. On the 20th of January he came in sight of the stronghold of the enemy, where the "Suns" had resolved on a desperate defense. On his way to the fort, the French general had been reinforced by about 350 Indian allies, who proved to be of invaluable service in the battle which ensued.

The besieged made valorous resistance for the space of three days, when, M. Perrier having brought up his artillery, they hoisted a flag of truce. After fruitless negotiations, which consumed many hours, the French commenced and kept up a furious cannonade on the fort, until a sudden tempest interrupted their fire. The Natchez availed themselves of the storm and darkness, to retreat into the neighboring swamps, but the Indian allies were sent in pursuit of them, while the French stormed the intrenchments. The former succeeded in capturing 427 of the Natchez; and with these prisoners, the French general, having razed the outworks of the fort, and dismissed his allies, returned in triumph to New-Orleans. The prisoners, among whom were the "Great Sun," and other chiefs, were soon afterwards sent to St. Domingo, and sold as slaves.

But this formidable tribe, though routed, were not yet conquered. One half of their original number yet remained free and dispersed in various quarters. Two hundred of them, having united near Nachitoches, then commanded by St. Denys, an officer of talent and experience, resolved on attacking and exterminating the whites at this post. But St. Denys adopted timely measures of defense, and having secured the aid of several friendly tribes, succeeded, after a hard-fought battle, in repulsing them. Following up this advantage, he pursued them to a neighboring fort, to which they had retreated, and gallantly assaulted them, killed 92 braves, and routed and dispersed the remainder. This was the closing scene of the "Natchez War;" and the scattered remnant of this once powerful and warlike tribe incorporated themselves with the Chickasaw and other tribes hostile to the French. Into those tribes they infused their own ferocity and hatred, as will be perceived hereafter, and succeeded in rekindling the fires which the French vainly supposed had been quenched in the blood of the Natchez.*

The colony of Louisiana, though victorious, was much enfeebled by the frequent drafts which the war had created on their wealth and population, and rejoiced in the return of

* Some of the Natchez were seen at the city of Natchez in 1782—fifty years after the Natchez massacre.

peace. The war had diminished their intercourse and trade with the Indian posts, and thus withdrawn one main source of their prosperity. But one permanent benefit resulted from this, inasmuch as it induced the "Western Company," which had hitherto monopolized this profitable trade, to surrender their charter—and gave the King of France an opportunity, of which he immediately availed himself, of conferring on all his subjects equal privileges, as to commerce, within the province of Louisiana.

Under the new organization of the government, M. Perrier was commandant-general; Loubouise, who distinguished himself at Fort Rosalie, was made lieutenant for Louisiana; and D'Artaguet, who had acquired reputation in the Black River expedition, was made lieutenant for the Illinois country.

The population of the whole colony now exceeded 5,000 souls, of which 2,000 were slaves. The settlements were rapidly extending along the fertile shores of the Mississippi, Red, Arkansas, Ouachita, Illinois and Wabash rivers. Above New-Orleans the coast was lined with cottages, and large plantations had been established at Manchac, Baton Rouge, Point Coupée, and other remote points; and at Natchez, settlements had extended along St. Catharine's and Second Creek.

Thus situated, in 1738 the colony of Louisiana was ready for a new career of prosperity—free from the restrictions of commerce, which had hitherto retarded their advancement—with a civil government well organized, and religious instruction amply supplied by the Vicar of New-Orleans, which then belonged to the diocese of Quebec.

But these gleams of prosperity were soon obscured by the "Chickasaw War." After having read the foregoing pages, it would naturally be concluded that the colonists would not again engage in war, without urgent necessity; but let it be remembered, that all wars between European emigrants and the aborigines of America have resulted from the perfidy, violence and oppression of the former, who seem to have adopted the decision of Cyrus, as related by Xenophon, that the big boy, who had a very small coat, had a right to compel the little boy, who had a very large one, to exchange with him.

The Indians very naturally considered this regard to the mere "fitness of things" as being by no means a correct rule of justice. If the numbers of the white men in the old world required additional domain, the red man's occupation as a hunter required extensive wilds remote from civilization. The interests, as well as the habits, of the two races, were therefore equally antagonistic. Every additional mile settled by the white man, was equivalent to a spoliation of ten miles of the Indian's hunting grounds.

For a long time the Chickasaw tribe had

been hostile to the French, and, as has been already related, had incorporated with their nation the refugees of the Natchez tribe, which act was itself a defiance of the French. They had frequently, at former periods, instigated small tribes to incursions upon the white settlements; and, influenced by English emissaries, had entirely excluded French traders from their borders. They also committed frequent hostilities upon the *voyageurs* between Mobile and the Illinois settlements, until the year 1729. About this time, they commenced urging the league and conspiracy, which eventuated in the Natchez massacre. After the defeat of the Natchez tribe, the refugees, who joined the Chickasaws, succeeded in persuading the latter to open hostilities against the French, and renewed the depredations, which, for a time, had been suspended, upon the French commerce. In consequence of these acts, the river trade was virtually suspended, and the colonies kept in continual alarm.

Under these circumstances, in 1734, Bienville returned from France, bearing a fresh commission from the King, as Governor and Commandant-General of Louisiana. His name had once been terrible to the savages, and he doubted not it would now frighten them into subjection. But, on demanding the surrender of the Natchez refugees, he received only a bold refusal. He instantly determined to chastise the insolence of the savages. With this view, he commenced levying troops upon the upper and lower Mississippi, and at Mobile, and formed an alliance with the Choctaws, who agreed to meet him with a large body of warriors, at Fort Tombigbee, on the river of that name. D'Artaguet, commandant at Fort Chartres, was ordered to march his whole disposable force to the Chickasaw nation, across the country, from Chickasaw Bluff, to which point he was to descend the Mississippi from Illinois, and to join the grand army under Bienville, who had resolved to ascend the Tombigbee river to its upper fork, with stores of artillery, and thence to march to the head waters of the Tallahatchie, at which point he expected to find D'Artaguet. The 10th of May, 1736, was the day fixed for the meeting of the two divisions of the army.

Bienville reached Fort Tombigbee on the 14th of April, 1736, and was there immediately joined by 600 Choctaw warriors, and six days afterwards by 600 more; making 1,200 auxiliaries.

Unavoidable delays prevented Bienville from leaving Fort Tombigbee till the 4th day of May, only six days before that fixed for the junction of the grand army with D'Artaguet's division. To reach the designated point of junction required twenty days—thus making the arrival of one of the divisions without the other almost certain, and exposing each to the danger of being cut off from the other, and destroyed separately.

They at length reached the point of the river, about twenty-seven miles from the nearest Chickasaw town, and debarking, erected a stockade for the protection of the sick, and of the stores and artillery. This done, Bienville marched in quest of the enemy, and on the 25th of May encamped in view of their stronghold. The next day the Choctaws attempted to surprise the enemy, but were repulsed. At noon the French advanced, and in two desperate assaults, were repulsed by the deadly fire from the fort. The battle raged for four hours, during which many of the French were killed and wounded. Bienville, seeing the British flag waving over the ramparts, and despairing of success without artillery, drew off his forces in excellent order, leaving four officers and thirty-two men dead, and sixty wounded, on the spot where they fell.

Next morning the bodies of the French, killed and wounded, were discovered already quartered and impaled on the stockades of the fort.

At a league's distance from the enemy, Bienville now intrenched himself, overwhelmed with chagrin; and having received no tidings respecting D'Artaguet's division, he resolved to abandon his enterprise, and return to New-Orleans. On the 29th May, he broke up his camp, and next day reached the point, at the head of the Tombigbee, where he had deposited his stores; and on the 31st, having dismissed his Choctaw warriors, he threw his cannon into the river,* and, floating down the river with his army, reached Forte Conde in safety. About the last of June he returned to New-Orleans, shorn of his glory, and covered with shame.

Alas! were this but all! But unhappily the brave D'Artaguet, accompanied by the red warriors of the north, from the shores of Lake Michigan and the Wabash, had descended the Mississippi to the Chickasaw bluff; and traversing the country east, had reached unobserved the Chickasaw country, and on the evening before the 10th of May encamped near the place of rendezvous. Here, in sight of the enemy, with his lieutenants, Vincennes and Voisin, and the Jesuit, Senat, he sought for intelligence respecting Bienville. But on the 20th of May, his Indian allies, eager for the fray, and impatient of restraint, forced him to lead them on to the attack.

The Chickasaws retreated before his well-conducted assault from the first fort and town, to a second town, from which they also retreated to a third town, in assaulting which

D'Artaguet received two wounds which disabled him, and he fell. Dismayed by this misfortune, the red men of Illinois precipitately fled. Voisin, though only sixteen years old, conducted the retreat, forcing his men to carry with them such of the wounded as could bear removal. D'Artaguet remained where he fell, weltering in his blood, and his faithful friend Senat, and his lieutenant Vincennes, voluntarily remained to receive the last sigh of the wounded, or share their captivity.

D'Artaguet and his companions were treated kindly by the Indians. Their wounds were dressed, and they were assiduously nursed by their captors, who were influenced by the hope of obtaining a great ransom from Bienville, who was known to be then advancing to their country. But the retreat of Bienville having destroyed this hope, the Chickasaws resolved to sacrifice their hapless captives to their savage revenge. They were taken to a neighboring field, and there, with the exception of one, who was left to relate the tragedy to his countrymen, the prisoners were tortured before slow fires till death ended their agonies. At this time, Bienville, ignorant of D'Artaguet's unhappy fate, and doubtless chiding him for delay, was ingloriously flying from the strife, for which he had been so impatient.

Not till his arrival at New-Orleans did Bienville learn the fate of D'Artaguet and his comrades. Must not his suspicions of D'Artaguet's fidelity, if he entertained any, have been converted into self-reproaches, for having, by his own want of energy, been instrumental in bringing about such a deplorable catastrophe?

To retrieve his late disgrace, Bienville determined on an expedition from the north, with a grand army, by the route which D'Artaguet had pursued against the Chickasaws, which, on being submitted to the minister, was approved. The spring of 1789 was the time appointed for this invasion, and directions were given, and preparations made accordingly. In the mean time, the Chickasaws had sent runners to their English friends, with numerous presents, consisting of the spoils of victory, to inform them of their triumph, and solicit an alliance with them.

About the last of May, 1789, Bienville, with his army drawn from Mobile and the settlements contiguous to the lower Mississippi, embarked in boats and barges at New-Orleans, and slowly ascended the Mississippi river to the mouth of the St. Francis, at which point he was joined by La Buissoniere with the Illinois division. Bienville's whole army now amounted to 1 200 whites, and nearly 2,500 Indians, making 3,700 fighting men. Crossing the river, the army erected a fort (called Assumption) as a depot. It was now the middle of August, and sickness began to ravage the army fearfully. Winter came, and disease

* Several years since, an Indian tradition was verified by the discovery, at the very spot of Bienville's debarkation, of the cannon and lead, which were thrown overboard by the unfortunate commander. An old man named M'Gilvery, had frequently stated that those silent witnesses of ancient tradition lay buried there, but without credence, till accident led to their discovery.

disappeared only to make room for famine. The invasion, therefore, was delayed till the arrival of supplies from New-Orleans. Thus the march was delayed till March, 1740, when not more than two hundred effective men could be mustered into line besides the Indians. With these M. Celeron was sent against the enemy, with instructions to treat for peace. The Chickasaws, supposing them to be the whole French army, upon their approach sued for peace, and M. Celeron immediately entered into a treaty of amity and peace with them. A deputation of Chickasaw chiefs and warriors accompanied him to "Assumption," where Bienville ratified the treaty which M. Celeron had stipulated. The fort was dismantled; the French army re-crossed the river; and Bienville, having there discharged his northern allies, again floated ingloriously back to New-Orleans, sunk lower than before in military reputation. Here closed his career. He had been an able commander, and had gained laurels, but age had disqualified him for the arduous task of tracking and conquering in their native forests the warlike savages, who had, several centuries before, boldly resisted the mail-clad warriors of old Spain under the chivalrous De Soto, and who were now aided by the wealth and the counsel of their English allies.

In the following spring Bienville was superseded by the Marquis de Vaudreuil, who was appointed Governor and Commandant-General of Louisiana. Bienville had for nearly forty years controlled the affairs of the colony, but now retired under a cloud of censure, and the disapprobation of his hitherto confiding sovereign.

About this time cotton was introduced into Louisiana, but was cultivated in small quantities.

Notwithstanding the military reverses of Louisiana, the settlements had extended along the lower Mississippi, and population and wealth increased. The tropical fruits, and varieties of the potato, had been introduced—the last affording sustenance to the colonists, and the former supplying them with luxuries, while they also adorned their homes with perennial verdure, unknown in less genial climes.

For ten years Louisiana remained free from Indian hostilities; but in 1752, the English had introduced vast quantities of British goods and commodities of English trade among the Choctaws and Chickasaws, within the territory claimed by France, and had established trading posts, and protected them by regular fortifications, built by the Indians under the instructions of the British traders. These traders omitted no opportunity of rendering the Indians hostile to the French, and endeavoring to unite all the tribes against the latter. To protect the south against the Chickasaws, Vaudreuil determined to invade the heart of

the country with a large force, amounting to 700 regulars and militia, and a large body of Choctaws, and other Indian allies, from the borders of the Tombigbee and Alabama rivers. With this army, having repaired Fort Tombigbee, the governor proceeded by the same route which Bienville had pursued in his first expedition, in 1738, into the Chickasaw country.

Having no artillery, and not being able to draw the Chickasaws out of their fortifications, Vaudreuil contented himself with ravaging their fields, and burning their corn and deserted villages. This done, he established a strong garrison at Fort Tombigbee, and returned to New Orleans. About this period the population of the French colony received a fresh accession in a large number of poor, but virtuous girls, transported from France at the royal expense, and endowed by royal bounty with a small tract of land—a cow and calf—a cock and five hens—a gun and ammunition—an axe and a hoe, and a supply of garden seeds. Each of these girls, with her dower, was given by Vaudreuil in marriage to some one of the soldiers, who had received an honorable discharge. This importation continued annually till the year 1751; and from this source have sprung many worthy families in Louisiana, and, doubtless, in Mississippi too.*

In 1755, the war between France and England had reduced the French king to the necessity of forming a treaty, by which the latter ceded to England all that portion of Louisiana lying east of the Mississippi river, except the island of New-Orleans. In 1763, France, by a secret treaty, ceded to Spain all that portion of Louisiana lying west of the Mississippi river, and the island of New-Orleans, lying east of that river, south of bayou Manchac, and the port and river Mobile. The established boundary between Great Britain's and France's possessions acquired by Spain, was the middle line of the Mississippi river down to the Manchac; thence along said bayou and Amité river to Lake Maurepas; thence through Maurepas, Pontchartrain and Borgue, to the sea.

In the mean time Spain had ceded to England all Florida, then embracing all the coast east of Perdido river and bay, to the St. Mary's river on the Atlantic coast.

In 1763, Florida was divided by the English king's decree into East and West Florida. By this decree, West Florida embraced the country east of the Mississippi river, and north of bayou Iberville, up to the 31st parallel of north latitude, and eastwardly to the Chattahoochee river.

But in 1732, in order to obtain a footing

*A similar importation was made into Virginia, while a colony, and the girls were sold at auction for tobacco, which seems at that early period to have been considered a *quid pro quo*.

westward of the Mississippi, and north from the Gulf of Mexico, George II. had planned a colony, under Gen. James Oglethorpe, to be called the Province of Georgia—to embrace the unoccupied country south and west of the Atlantic, to the Mississippi river. In 1783, an English colony was planted at Savannah, with the view of carrying out this design. This was the origin of the present state of Georgia.

As by the decree of the king, the 31st degree of north latitude had been established as the boundary of West Florida, of course all of the country north of that line and east of the Mississippi would, under Oglethorpe's charter, belong to the colony of Georgia.

It is stated by Monette, that the Court of St. James, having learned that by fixing the 31st degree of north latitude as the boundary of Florida, they had left out important settlements on the east side of the Mississippi river, and north of that line, issued a second decree, extending the northern boundary of West Florida as far as the mouth of the Yazoo river. But it appears from better authority,* that there was only a commission issued, authorizing the Governor of West Florida to make this extension, without any evidence that it was ever done by any formal declaration.

As long as both Florida and Georgia belonged to Great Britain, this uncertainty of boundary could not be of any practical importance, or give rise to any conflict of jurisdiction; but after the revolt of the American colonies, including Georgia, the actual boundary of West Florida on the north became of great importance to individuals, who had received grants of land north of the 31st degree, from the Governor of West Florida, who had no right to make such grants beyond the limits of West Florida. By the articles of cession from Georgia to the United States, and by the action of a Board of Commissioners established by Congress, many of these grants have been saved, or confirmed; but on the other hand, many have been lost for want of such confirmation by the government of the United States, and for other reasons.†

This uncertainty of boundary also led, at a future period, to misunderstandings between the United States and Spain, as will be hereafter explained in this narrative.

TREATY OF 1783—THE ACADIANS—SCHEMES OF DISUNION IN THE WEST.—After the cession by France to Great Britain, the inhumanity of the English government to the French inhabitants of a portion of the territory ceded to her by France drove them destitute from their homes, and many of them found their way down the Mississippi to New-

Orleans, where they were kindly provided with the means of settling upon the coast west of the Mississippi, and they still constitute a distinct class of the population. Many of them, doubtless, settled at and near Natchez. Their expulsion from their homes was one of the causes by which the population and wealth of the French colony were augmented.

In the year 1770, a spirit of adventure prevailed in the English colonies, which led numerous emigrants to the West. The Mississippi river did not limit their explorations. The King of England had held out inducements for emigration to Florida, and a water communication of 2,000 miles afforded a comparatively easy access to it, from Virginia and North Carolina. The point of destination was the Walnut Hills, (now Vicksburg,) Natchez, Bayou Sara, and Baton Rouge. Before the summer of 1778 had ended, four hundred families from the Atlantic sea-board had advanced to the Monongahela and Ohio rivers, and descended in boats to the Natchez country.

Early in February, 1764, the old French posts, including Natchez, had been garrisoned with British troops. It was now presumable that the whites would be safe from the Indians. But, at a bend of the river at Fort Adams, four hundred men, under Major Loftus, in keel-boats, ascending to the Illinois posts, of which he had been appointed commandant, received a destructive discharge of fire-arms and arrows from the Tunica Indians, who were concealed on both sides of the river. The whole flotilla, after feeble resistance, suffered themselves to be borne back by the current, beyond the reach of the enemy. Many were killed, including Major Loftus, and many wounded. A village now stands where Fort Adams stood, and bears the same name. It was formerly known as Loftus's Heights, in commemoration of this tragical event.

When it was ascertained that the English jurisdiction had been extended over all the settlements east of the Mississippi up to the Walnut Hills, the French, then numerous, expressed great dissatisfaction, and some even removed to the west side of the river, south of Manchac, in order that they might again be within French jurisdiction. But on receiving assurances that their religion, lives and property would be protected, the greater part remained.

After the extension of the British authority in 1765, and until the revolt of the American colonies, England encouraged emigration to the upland region, extending from the Yazoo river to Baton Rouge, by liberal grants of land. In 1768, numerous emigrants from Georgia, the Carolinas, and New Jersey, settled in the regions drained by the Homochitto and the Bayou Pierre, within fifteen miles

* See 12 Wheaton, 527.

† See 9 Wheaton, 678; 12 Wheaton, 527; and 13 Smedes & Marshall's (Mississippi) Reports, 106.

from the banks of the Mississippi river. Not long afterwards a body of Scotch Highlanders arrived, and colonized the branches of the Homochitto, about thirty miles east of Natchez. This colony was subsequently augmented by new emigrants, and bore the name of New-Scotland.

In 1773, the greatest number of emigrants arrived; after this period, the revolutionary war checked emigration till the year 1777, except that, after the declaration of independence, many of the loyal subjects of Great Britain, disliking the appellation of "British Tories," are said to have retired from the new states, and to have emigrated to the region between the Yazoo and Baton Rouge; the inhabitants of which took no part in the hostilities against England, but remained faithful subjects to the crown.

During this period, England encouraged monopolies of trade by her subjects, and the introduction of African slaves, in large numbers. From Fort Bute, (built in 1764, on the north bank of Bayou Manchac, near its junction with the Mississippi,) she supplied the settlements of Louisiana with many English commodities, and with slaves—the introduction of which had been prohibited by Spain. To prevent this illicit trade with Spanish subjects, the Spanish governor had a fort constructed on the south bank of the Manchac, opposite to Fort Bute.

But the period was close at hand when Great Britain was destined to lose all the possessions which she had for so many years been contending for. During the revolutionary war troops were sent from Virginia to the Illinois posts, and a bloody and protracted frontier war resulted in the loss of her north-western possessions, including the post of Kaskaskia. During this frontier war, the federal government was supplied frequently from New-Orleans with provisions and munitions of war, transported in barges up the Mississippi as far as Fort Pitt, under the command of American officers. The friendly disposition of the Spanish authorities in possession of the west side of the Mississippi river greatly facilitated this mode of transportation. Thus, during the years 1777, 1778, and 1779, the American posts on the Ohio and upper Mississippi rivers were supplied regularly with military stores, and even artillery. It was, however, a hazardous enterprise; and although the inhabitants of the British possessions east of the Mississippi river had not participated in the war, yet it was deemed necessary by Captain Willing, under whose command these enterprises were conducted, to ascertain whether the Natchez settlers would continue neutrals, so far as not to interrupt the transportation of supplies from New-Orleans to the Ohio posts. He accordingly landed with fifty men, in 1778, at Natchez, and took the sense of a public meeting, convened for the occasion, and

entered into a convention of neutrality with them. He was informed, however, that several individuals would not be governed by this convention. These he resolved to place in military custody. He therefore had them conveyed, by night, from their houses, with their slaves and other personalty, to his vessel, and detained them till they gave a pledge not to violate the convention of neutrality. They were then set at liberty, with their property, except one individual, a pensioner of the British king, whom, on account of his energy and attachment to the interests of the British crown, he conveyed to the city of New Orleans. There he gave him the liberty of the city, upon his parole, till his return to Natchez. Disregarding his parole, he returned to Natchez, resolved on vengeance. Not many weeks afterwards, on the return of one of Captain Willing's boats from New-Orleans, it was decoyed to the shore, at Ellis's Cliffs, and was there attacked by twenty-five ambushed men, who fired a sudden volley upon his crew, which killed five men and wounded several others. The boat immediately made for the shore, and the crew surrendered. The boat was commanded by Captain Reuben Harrison, and the concealed party by Colonel Hutchins, aided by Captains Hooper and Bingaman. This occurred in 1772. On his return from New-Orleans, Captain Willing landed at Natchez, and levied a heavy contribution upon his vindictive enemy, for the benefit of the American army.

This outrage on the Americans accelerated a determination of the Spanish authorities, previously formed, in view of an expected rupture between Great Britain and Spain, to subjugate that part of Louisiana east of the Mississippi river, which had been ceded by France to Great Britain; and the Spanish governor planned a vigorous campaign, to commence as soon as war between England and Spain should be declared. All those within this region who had emigrated from the eastern colonies prior to the revolution were anxious to see the British authorities excluded from the country, and many of these were willing to aid personally, and by their influence, the Spanish governor, in reducing the British posts in the south, east of the Mississippi. The governor did not long want an opportunity of executing his plan.

In 1779, Spain, as an ally of France, declared war against England, and Don Bernard de Galvez, colonel of the Spanish armies, and governor of Louisiana, a man of genius and ambition, having received early intimation of the fact, immediately concerted measures with such energy, that on the first of September he was before Fort Bute with 1,400 men. After a brave resistance, for five days, the fort was carried by storm, and demolished.

Reinforced by several hundred militia, including many Americans, he marched to Baton

Rouge, then garrisoned with 400 regular troops and 100 militia, and abundantly supplied with arms, ordnance, and all kinds of military stores. On the 21st of September, after a brisk cannonade of several hours, the commandant capitulated, by surrendering to the King of Spain not only the post of Baton Rouge, but all that portion of the region then known as West Florida, including the forts at Natchez, Amite, and Thompson's Creek. Thus Great Britain lost the remnant of her possessions in the valley of the Mississippi.

Galvez, pushing on his conquests, succeeded, during the year 1780, in subjugating the whole province of West Florida.

Subsequently, East Florida yielded to the arms of Spain; and by the treaty of 1783, England confirmed to his Catholic Majesty the possession of both East and West Florida.

During the operations of Galvez against Pensacola, the English colonists in the Natchez district, having learned that a powerful British armament was off the coast of Florida, for the recovery of his Majesty's possessions, attempted to overpower the Spanish garrison at Fort Panmure, at Natchez, and reinstate British authority over that portion of the province.

Having secured the aid of a large number of Choctaw warriors, they raised the British flag on an eminence above the town of Natchez, in full view of the fort, and commenced their operations for its capture. During the night they planted their cannon near the fort, but a heavy fire, the next morning, compelled them to retire. During a day and night, a moderate cannonade was kept up between the besiegers and the fort; at length the garrison, having been persuaded that the fort had been undermined with a train, which was to be ignited on the following day, capitulated, on condition of being permitted peaceably to retire, and march to Baton Rouge. But in a short time intelligence was received that a Spanish, instead of a British fleet, had arrived with a reinforcement for Galvez. This filled the insurgents with consternation; and mindful of the fate of O'Reilly's victims ten years before, they sought safety in flight. Many perished with fatigue and exposure, and others fell into the hands of the Spanish authorities, and were treated as rebels.

On the 29th of July, 1781, the civil and military commandant of the fort at Natchez commenced measures for the punishment of insurgents. Arrests and confiscations commenced. During September and October, the wealth of twenty fugitive rebels had been seized for confiscation. Before the middle of November, seven of the leaders, who were prisoners at New-Orleans, were convicted and sentenced to death, but were afterwards reprieved by the governor-general.

Thus ended the first revolt of the Anglo-Americans against the Spanish authorities.

The second one, thirty years afterwards, was more fortunate, as will be hereafter related.

In 1783, by a treaty of peace between Great Britain and the United States, the southern boundary of the latter was established at the 31st parallel of north latitude.

By the same treaty, Great Britain confirmed to Spain all the Floridas, south of the 31st degree of north latitude.

Peace having been thus concluded between the belligerent powers contending for possession of the Mississippi valley, emigrants from France, the *Mexico-Spanish Colonies*, the West Indies, and the United States, commenced pouring into Louisiana.

At the same time the King of France caused a large number of exiled Acadians to be brought into the colony, to join their countrymen, who, thirty years before, had fled from Acadia, to escape British persecution, and settled in Louisiana. Agriculture and commerce, which war had so long suspended, once more roused the colonists to that peaceful emulation which alone confers true and permanent prosperity and happiness on the human race.

In 1785, the official census showed a population exceeding 33,000 in Louisiana, including the Natchez settlements; of this number lower Louisiana contained 28,000, of which 5,000 belonged to New-Orleans.

In 1785, Galvez removed his head-quarters to Cuba, of which he had been appointed Captain-General, and to the government of which Louisiana had been attached, until the regular appointment of Galvez's successor.

About this period, the Catholic clergy, jealous of the influence of the western people of the United States, attempted to introduce the Inquisition into Louisiana. But Miro, judge of residence, caused the zealous ecclesiastic, who had been intrusted with this enterprise, to be seized while asleep, and safely conveyed on board a vessel, in which he was transported to Spain.

The King of Spain now signified his desire that the British settlers (who, by the treaty of 1783, were required within eighteen months to quit the territory) should be permitted to remain, and enjoy all the privileges of Spanish subjects; and, to induce the Irish to remain, the judge of residence caused the Natchez district to be supplied with Irish Catholic priests, who arrived early in the year 1786.

In 1786, Miro received his commission as successor of Galvez. He must have found the colony full of turbulent spirits, inasmuch as his first edicts prohibited gambling, duelling, and the wearing of concealed weapons. Under his administration the colony flourished. Population multiplied, commerce increased, and the trade with the settlements on the Ohio and its tributaries had become extensive and valuable.

It has been already observed, that owing

to some doubts respecting the boundaries between the Spanish domain and Georgia, difficulties had arisen. Georgia had now extended her settlements west, and come into contact with the Spanish settlements north of the 31° of north latitude; Georgia claimed all north of that degree to the mouth of the Yazoo river, under Oglethorpe's charter, and Spain claimed all which had been, at any time, actually subject to French dominion.* This whole region, containing a population of 10,000 souls, was now in possession of Spain. Commissioners had gone from Georgia to New-Orleans in 1785, to demand a surrender of this territory, and an acknowledgment of the line of division as fixed by the treaty of 1783. But the subject had been referred to the general government. Georgia had, by a legislative act, on the 7th of February, 1785, erected the county of Bourbon, near the Mississippi river, giving to citizens of the United States, residing there, preference over any foreigner to lands within this territory. This act, after the whole subject had been referred to the federal government, was repealed.

A new source of controversy was now arising, which was destined to deprive Spain of all the possessions which she had wrested from England. This was the natural right claimed by the people of the North-western Territory to navigate the Mississippi river to New-Orleans and the Balize, free from any tax or other molestation or hindrance. The trade between the inhabitants of the North-western Territory and Louisiana had become very important; and Spain, desirous of making it a source of revenue to herself, established ports, and exacted harbor duties and other charges incidental to commerce. The western traders considered these charges un-

just and oppressive, and only paid them because compelled by military force. Many even resisted every attempt made to enforce payment, and were, consequently, seized, fined, and imprisoned, and subjected to great expense, loss, and delay. In some cases, cargoes were confiscated, and the owners driven destitute back to their homes. During the years 1785 and 1787, these occurrences roused such a feeling of animosity and thirst of vengeance among all the western people, from the banks of the Monongahela to those of the Cumberland and Tennessee, that there was needed only some daring military spirit to bring about an invasion of New-Orleans, in the event of the general government failing to obtain by negotiation the privileges indispensable to the prosperity of the western country.

In 1787, a separation from the Atlantic states, and the erection of an independent government, with the view of wresting Louisiana from Spain, was seriously contemplated, if not actually planned. Under these circumstances, General James Wilkinson, a merchant of Kentucky, obtained from the Spanish authorities a license to introduce western produce into New-Orleans, free of duty, on the condition that he would use his influence in conciliating the western people, and encourage their immigration to the Spanish colonies, by relaxing the system of imposts, as to all who should settle within their limits, east of the Mississippi river. For a time the Spanish minister, hoping to derive some profit to himself, connived at this plan; but being foiled in his expectations, suddenly ordered a strict enforcement of the impost laws.

At the request of Governor Miro, Wilkinson prepared a memorial to the crown, respecting the relations of Spain with the inhabitants of the North-western Territory, which was transmitted to Madrid. This document was composed with much address.* The views set forth in it were adopted by his Majesty as the basis of the future administration of affairs in Louisiana.

It is probable that his Majesty was influenced by the intimation contained in this memorial, that an alliance might possibly be formed between his Spanish subjects, in the valley of the Mississippi, and the republican settlements of the West.

There was at this period great danger, either of an invasion of Louisiana by the people of the North-west, or of an alliance between the two, and the formation of a separate government. The apparent tardiness of the general government in negotiating with Spain respecting a privilege, so indispensable to the western people, as the right of navigating the Mississippi, had alienated the attachment of the latter; and a rumor that the American minister had consented to

* The curious reader will find the opinion of the court, delivered by Judge Clayton, in the case of *Montgomery and others vs. Ives and others*, reported in 13th vol. of S. & M.'s *Miss. Reports*, full of interesting information on this subject, which will fully repay the labor of its perusal. Judge Sharkey, who, though he concurred in the opinion of the court, thought "there never had been an extension of the northern boundary of West Florida above the 31st deg. of north latitude," supported this position by the following very concise and forcible argument: "The colonies became then independent, with defined boundaries. If that memorable event put an end to the authority of Great Britain over the territory above the 31st deg. of north lat., it must have done so because that territory was within the limits of some one of the revolting colonies. The declaration of independence did not extend over any territory not within some one of the colonies, nor was there any acquisition of territory by conquest, not lying within their boundaries. If the territory above the 31st deg. of north latitude was part of the colony of Georgia, the authority of Great Britain over it ceased when Georgia became independent. If, on the other hand, it was part of West Florida, the authority of Great Britain did not cease, as Florida was not one of the revolting colonies. The treaty did not cede territory to the colonies, but only acknowledged their independence as states, with known boundaries."

* See 1st Monette's Valley of Mississippi, p. 473.

postpone the assertion of this right for twenty years, produced an indignation among them, which the Spanish king hastened to avail himself of, by sending emissaries to Kentucky, to enlist the prominent men of that and the adjoining states in the treasonable scheme of throwing off the federal authority, and forming an alliance with Spain.

But these machinations were happily frustrated, as well by the change of policy in the administration of Spanish affairs at New-Orleans, as by the declaration of the general government of its intention to insist upon the free navigation of the Mississippi, according to the treaties of 1763 and 1783, to both of which Spain had been a party.

MOVEMENTS OF ELLICOTT, WILKINSON, AND GAYOSO—ORGANIZATION OF MISSISSIPPI TERRITORY.—The Spanish king ordered liberal grants of land to be offered to all emigrants from the territories now comprising Kentucky and Tennessee, to the Spanish provinces. Under this liberal system, numerous settlements were made by Americans in Upper Louisiana, as well as in the province east of the Mississippi river, and below the mouth of the Yazoo. The Spanish governor, in the mean time, was instructed to use all means of effecting a political union between the Spanish provinces and the western people of the United States. This policy continued two years, and thus delayed all danger, during that period, of an invasion of Louisiana by the north-western settlers; but, at the expiration of that time, Guardoqui, the Spanish minister, suddenly reenacted the revenue laws, and seizures and confiscations, fines and imprisonment, were recommenced with such rigor, as again to rouse the resentment of the western people, and render an immediate invasion of the Spanish provinces a popular measure.

An extensive conflagration occurred at this moment at New-Orleans, and the distress and want consequent upon it compelled the governor to release all prisoners, restore their property, and rescind all commercial restrictions, in order to induce the western traders to supply the city with provisions. At the same time donations of land were made to all emigrants; and many Americans, lured by this generosity, settled in the Natchez district and elsewhere within the Spanish territory.

The census of 1788 showed an aggregate population, in Louisiana and West Florida, of 42,611 souls, being an increase of 10,000 in three years. This included the importation of Acadians and Spaniards, before mentioned; the remainder were Americans. Of the whole population there were—free whites, 19,445; free colored persons, 1,701; slaves, 21,465.

In September, 1788, it became absolutely necessary for the federal government to require from Spain a full concession of the right, claimed by the western people, to the free navigation of the Mississippi. Accordingly,

Congress resolved that "the free navigation of the Mississippi is a clear and essential right of the United States, and that the same ought to be considered and supported as such." The American ministers were charged specially to negotiate for the surrender of West Florida, near the Mississippi, and the whole eastern bank of the river to the sea, *provided* the free use of the river through Louisiana could not be otherwise obtained. But the Spanish ministers showed little inclination to relinquish any portion of this territory, and not only delayed all negotiation, but instigated the Creek and other Indian tribes to a violation of their treaties with the United States, and to acts of violence, with the view of preventing any future settlements within the South-western Territory. Spanish posts and garrisons occupied the country east of the Mississippi, as high up as Memphis, and the Spanish authorities had organized the militia of Louisiana, with the view of defending every position assumed by Spain against the United States. At the same time, large American forces were concentrated on the Ohio, and the Spanish governor had every reason to fear that an army, flushed with victory in the north-west, would descend upon the first spring flood of the Ohio and Mississippi rivers, and invade Louisiana. The President of the United States had himself authorized and encouraged preparations for such a conflict. At this juncture, Spain became embarrassed by her European wars, and dreading hostilities against Louisiana, intimated a disposition to settle the points in controversy. General Washington immediately dispatched Thomas Pinckney, as minister plenipotentiary to Madrid, and on the 20th day of October, 1795, a treaty was signed, adjusting all subjects of dispute. By this treaty, the 31st parallel of north latitude was recognized as the northern boundary of the Spanish possessions, and Spain agreed, within six months, to withdraw her troops and garrisons from the territory north of that boundary. It was further stipulated, that the people of the United States should use the port of New Orleans as a place of deposit for produce and merchandise, for the space of *three years*, and export the same free of all duty. This treaty was duly ratified by the Senate of the United States, and the President commenced preparations to carry its stipulations into effect, such as surveying the boundary line, enforcing neutrality among the Indians, &c.

This treaty had the effect of arresting a scheme which the citizens of Georgia had conceived, of expelling all the Spaniards from the territory east of the Mississippi river, and north of the 31st parallel of latitude, and also led to the repeal of an act of the Legislature of Georgia, incorporating the Mississippi Company, and granting millions of acres of land within the disputed territory. It will be here-

after perceived that this whole territory was afterwards ceded by Georgia to the United States, April 24th, 1802.

The treaty of Madrid provided for the appointment by Spain of a commissioner to meet one to be appointed by the United States, within six months after the ratification of the treaty, to ascertain and fix the northern boundary of the Spanish province, that is, the 31st parallel of latitude. The President of the United States, in due time, appointed Col. Andrew Ellicott as the American commissioner, and Don Manuel Gayoso de Sernos was also appointed commissioner of Spain, under the orders of Baron de Carondelet, governor-general of Louisiana. Gayoso was then governor of the Natchez district.

In September, 1796, Col. Ellicott left Philadelphia for Natchez, and obtaining at Pittsburg thirty woodsmen armed with rifles, descended the Ohio in a barge; but owing to low water and ice, he did not reach Natchez till the 24th day of February, 1797. Before this time he had been overtaken by an additional military escort of thirty men, but at the request of Gayoso, left the whole escort of sixty men at the Bayou Pierre. After an interview between Col. Ellicott and Gayoso, the latter reluctantly consented to fix the 19th day of March as the day on which both commissioners should repair to Bayou Tunica, with the view of ascertaining and defining the boundary.

Col. Ellicott hoisted the American flag on an eminence, near Fort Panmure, within the present limits of the city of Natchez, and ascertained by observation that his position was about 39 miles north of the 31st deg. of north latitude. The governor-general, Carondelet, was, in the mean time, duly notified of his arrival, as, by the terms of Gayoso's appointment, Carondelet was to be present, and direct the Spanish commissioners in ascertaining and defining the boundary. But Carondelet evaded the appointment on the plea of important business at New-Orleans, and tried to induce Col. Ellicott to visit that city. The American commissioner declined the invitation, and ordered his military escort, under Lieutenant M'Leary, from the Bayou Pierre to Natchez, at which point they arrived on the 15th March, 1797. Having encamped near Col. Ellicott's flag, the commandant soon after formally demanded the surrender of Fort Panmure to the American troops. Gayoso, who had hitherto feigned preparations to abandon the fort, now suddenly returned all the stores and artillery into it *by night*, and placed it in a state of defense; he also, soon after, proceeded to strengthen the forts at Natchez and Walnut Hills, by reinforcements from New-Orleans. Upon a protest against these perfidious measures, by the American commissioner, Gayoso declared that they were prompted by apprehen-

sions of Indian hostilities, and of an invasion of Louisiana by the British troops from Canada. In order to convince Col. Ellicott of the truth of the first pretext, Gayoso caused swarms of drunken Indians to parade with drawn knives and threatening gestures before the American camp; and in order to conciliate them, Colonel E. was compelled to distribute rations and presents among them. For the last pretext, there seemed afterwards to have been some foundation, as there is no doubt an invasion of Louisiana was contemplated by Canadians, and influential men in the United States, among whom was a United States senator from Tennessee. But Col. Ellicott saw in these measures only a determination to postpone the surrender of the territory, under the hope that some circumstance might happen which would restore this valuable region to Spain. All hopes of inducing the western people to throw off their allegiance to the general government and unite with Spain, had not been abandoned. A Spanish agent was again sent to Kentucky to sound public men on this subject, and stir up disaffection to the United States in the West; and the death of General Wayne, by which General Wilkinson, who was supposed to be favorable to this design, had been advanced to the command of the Northwestern Territory, gave fresh encouragement to these hopes.

The American commissioner became much incensed, and an angry correspondence commenced between him and Gayoso. The people of the district, fearing that the Spaniards would not surrender the territory, shared in the excitement and indignation of the American commissioner. The latter maintained his position, anxiously expecting an advanced guard of American troops from Fort Massac; a detachment of forty men, descending from this point, under Lieutenant Percy Smith Pope, arrived at Walnut Hills early in April, 1797, and encamped near the Spanish fort at that point. On the 17th April, Col. Ellicott having learned his arrival, required him to advance to his relief without delay; and on the 24th April, Lieutenant Pope, with his detachment, arrived at Natchez, and was escorted to the American camp by Lieutenant M'Leary's company.

Gayoso strongly remonstrated against the presence of the American troops, and urged their removal to several points; but the American commissioner resolved to maintain his position, and Lieutenant Pope proceeded to the completion of the intrenchments of his camp. He also strengthened himself by voluntary enlistments, and by the apprehension of some deserters from the north-western army, who were found among the Spaniards.

In a few weeks it was ascertained that the Spaniards had sent emissaries to the neighboring tribes of Indians, with instructions to excite their resentment against the American

forces. This cause, together with the perfidy of the Spaniards in deferring the fulfilment of the treaty, greatly excited the people. There were now four thousand Americans residing north of the stipulated boundary, impatient for the departure of the Spanish authorities, and the establishment of the federal authority. Many were ready to capture Fort Panmure, and drive out the Spanish authorities by force. These citizens inhabited the region extending north from the boundary to Bayou Pierre, and thence east to the sources of this stream, and of Cole's Creek, St. Catharine, Homochitto, and Buffalo.

The governor-general endeavored to allay this excitement, by issuing a proclamation on the 24th of May, declaring that the country would be surrendered after the danger of British invasion had passed away. But this, instead of calming, inflamed the public mind to a still higher degree of excitement.

At length, Gayoso declared that he had received instructions from Carondelet to remove the artillery and military stores from all the forts north of the stipulated boundary. Thus open violence was prevented until the 9th day of June, when an American citizen, a Baptist preacher, was seized by the Spanish authorities, and placed in the stocks, within the fort. The people flew to arms, and compelled the Spanish commandant, and his principal officers and their families, to take refuge within the walls of the fort. Military companies were immediately organized—officers chosen to command them—and, in a few hours, the Spanish authority was virtually overthrown.

At the same time, Lieutenant Pope issued an address, calling on all the citizens to assert their rights, and pledging himself to protect them from every act of hostility.

A large concourse of people met at Beach's, on the Nashville road, on the 20th day of June; and after free discussion, appointed a "committee of public safety," consisting of seven prominent men, to conduct future negotiations with the Spanish authorities. The consent of this committee was declared to be necessary to the validity of every Spanish edict.

On the 18th of June, Gayoso desired and obtained an interview with the American commissioner, at Captain Minor's house, to which place he made his way from the fort, secretly, through cane-brakes and a corn field, to the back door, and thence to the parlor, in such a state of humiliation as deeply affected Colonel Ellicott. Here he met the committee—recognized their representative capacity—acceded to their demands of amnesty to the citizens who had revolted, and of their exemption from service in the Spanish militia, except in cases of riot or Indian hostilities. These concessions all tended greatly to allay the popular excitement.

Mistrusting the fidelity of one of the "com-

mittee,"* Colonel Ellicott persuaded the governor to dissolve it, and to authorize the election of a permanent one in its stead. Accordingly, a new committee of nine members was elected in July, by virtue of Spanish authority, to be "permanent" in its duration. This committee was the finishing stroke to Spanish authority and jurisdiction.

During the ensuing autumn, Col. Ellicott removed his camp to the present site of the town of Washington, seven miles N. E. of Natchez, and returned to Natchez on the 27th of September. On the 26th July preceding, Gayoso, having been appointed governor-general of Louisiana, departed for New-Orleans; but previously appointed Capt. Stephen Minor temporary commandant of Fort Panmure. Soon afterwards, Colonel Grandpré was appointed lieutenant-governor at Natchez, but at the request of the permanent committee, never appeared there, and Capt. Minor continued to exercise the duties of that office. Harmony having been thus restored, Lieutenant Pope had retired with his command to the more healthy position at Washington, as above related.

General Wilkinson having learned the delay of the Spanish authorities in evacuating the forts north of the boundary, dispatched Capt. Isaac Guion, a revolutionary officer of experience and sound sense, and enjoying the confidence of the President, with a detachment of troops, to assume the command at Natchez. He arrived in December, and assumed the command. At first he treated the Spanish authorities with respect, but discovering that, without any good reason, they were still inclined to delay the evacuation of the forts and the survey of the line of demarcation, he became impatient, and resolved to take the fort by assault. But on the 23d March, 1798, Fort Nogales, at Walnut Hills, was evacuated, and the troops descended thence to Natchez. Here they remained, studiously concealing the time of their departure; and Capt. Guion declared, that the first day of April should not witness the Spanish garrison within the fort.

On the 29th March, at midnight, the Spaniards sent their artillery and stores aboard their boats, and about four o'clock, on the morning of the 1st April, the troops marched from the fort to the river bank. Before daylight they had embarked, and had proceeded several miles on their voyage to New-Orleans. No farewell salute honored their stealthy departure. Col. Ellicott alone, suspecting their intention, rose early, and walking towards the

* The members of the first committee were, Joseph Bernard, Judge Peter B. Bruen, Daniel Clarke, Gabriel Bencist, Philander Smith, Isaac Gaillard, Roger Dixon, William Ratliff, and Frederick Kimball. Of these, F. Kimball was suspected. An active opponent of the measures of Colonel Ellicott was Colonel Anthony Hatchens.

fort, entered its open gates just after the rear guard had passed out of it, and from the parapet witnessed all their movements, till the whole flotilla was out of sight.

All cause for delaying the survey of the line of demarcation having been now removed, Gayoso appointed Capt. Stephen Minor and Sir William Dunbar commissioners of Spain, who, with Col Killicott, repaired to Bayou Tunica, six miles below Fort Adams; and on the 21st of May, 1798, having been joined by Governor Gayoso, they proceeded to mark the line as far as East Florida, the survey through which, owing to Indian disturbances, was not made until the following year.

In the mean time Congress had erected the territory, surrendered by Spain, into a territorial government, by the name of the "Mississippi Territory." Its boundaries were the Mississippi on the west, the 31st° of latitude on the south, a line drawn due east from the mouth of the Yazoo to Chattahoochee river on the north, and on the east by said Chattahoochee river.

Winthrop Sargent, former Secretary of the North-western Territory, under Governor St. Clair, was appointed the first governor of the Mississippi Territory. He arrived at Natchez on the 6th day of August, 1798, and on the 26th day of the same month, General Wilkinson arrived with the federal army.*

PROCLAMATION AND LETTERS OF WINTHROP SARGENT, FIRST GOVERNOR AND ORGANIZER OF THE TERRITORY.—The long disputed boundary between Spain and the United States having been, at length, amicably established, the subjects of his Catholic Majesty, who were unwilling to fraternize with republicans, quietly retired from the Natchez District. General Wilkinson, with the view of insuring future tranquillity, established a military post at Loftus's Heights, (afterwards named Fort Adams, in compliment to the President,) and other posts along the line eastward, with a small garrison in each. His own head-quarters remained at Natchez, opposite to which a new Spanish fort was erected. A convention between Gayoso and General Wilkinson provided for the mutual extradition of deserters across the boundary, or across the river. A most amicable spirit prevailed between the civil and military authorities of the two provinces, in commemoration of which the Spanish fort opposite to Natchez received the name of "Fort Concord," from its commandant, Don José Vidal. The parish of Concordia and town of Vidalia owe their names to the fort and its courteous commandant.

Nevertheless, great jealousy was entertained by the Spanish government of American immigrants, especially to such as had served in the revolutionary war. Though, in the war, Spain had favored the Americans out of hatred to Great Britain, yet she had not then fully realized the possibility of her dominions coming in conflict with those of the republic; and, in truth, she was induced to conquer the Natchez District and the Floridas only with the expectation of holding perpetual possession of them, and rendering the Indian tribes a perpetual barrier between her American possessions and those of the United States. This policy was openly avowed by her at the treaty of 1783, between Great Britain, France, and the United States, and, as will be hereafter seen, was espoused by the French government, and only frustrated by the firmness and sagacity of the American ministers, Mr. Jay and Mr. Adams. This policy was now rendered impossible by the surrender of the Natchez District, and in the rapid influx of American population into it, occasioned by its transfer to the United States. She saw foreshadowed that destiny by which she was ultimately driven from the American continent. The most stringent regulations were adopted to discourage the immigration into her territory of any other than her own subjects. Every immigrant was required immediately to take an oath of allegiance to Spain, and to domiciliate in some old Spanish settlement, under the eye of a Spanish commandant. No foreigner, without money, slaves, or other valuable property, could receive a grant of land until he had lived, and been honestly employed, for the space of four years, within the colony. For want of equally salutary restrictions on the American side of the line, the worthy governor, Winthrop Sargent, (who was a firm supporter of the alien and sedition laws,) was greatly troubled by turbulent and irresponsible men, as his letters, hereafter to be exhibited to the reader, will abundantly show.

The ordinance of 1787—the provisions of which (except the clause interdicting slavery) had been extended by Congress to the Mississippi Territory—required the appointment of a governor, secretary, three judges, and other civil officers, and provided for a General Assembly, to consist of the governor, a council of five, and representatives of counties, and one delegate to Congress.

The General Assembly, in 1799, passed an act appointing justices with civil and criminal jurisdiction of limited extent, with the right of appeal to the parties affected by their judgments. (*Hutch. Code*, ch. 1 and 50.) The governor, by proclamation, divided the district into the counties of Adams and Pickering, so named in honor of the President and Secretary of State. The district extended about 100 miles north of the southern boundary, and about 25 miles east of the Mississippi river.

* Monette says, that the governor was accompanied by the territorial judges. This, it will hereafter be perceived, in Governor Sargent's letters, is an error. The governor had not even a secretary, and wrote out with his own hand the archives of the territory.

It comprised about 6,000 inhabitants, of whom more than 1,000 were slaves. The territory north of this, for 500 miles, was inhabited by Indians. The Natchez District having been surrendered to the United States as part of Georgia, the consent of that state had been previously obtained to the establishment of a territorial government, by Congress, over it. This consent was followed, several years afterwards, by an act of cession by Georgia to the United States (in 1802) of all her lands south of Tennessee, in consideration of \$1,250,000 of the first net proceeds of the ceded lands, the United States recognizing all grants of land made by Georgia to inhabitants thereof prior to 27th October, 1795. All the land so ceded was afterwards, by act of 1804, attached to the Mississippi Territory, which thus comprised the whole territory now composing Alabama and Mississippi, from the 31st to the 35th degree of north latitude.

The confidence in the federal government, exhibited by Georgia, in thus readily conceding to the former all jurisdiction over a country which she herself was incapable of protecting, presents a favorable contrast to the conduct of Texas, in reference to that portion of New-Mexico claimed by her.* The increasing power of the federal government was then a source of pride, and not of jealousy, to the old states, who had established it as a remedy for the evils of their previous weak and inefficient confederation. The reverence with which the federal authority was then regarded, is forcibly illustrated in the style of Governor Sargent's letters to the executive department. They are replete with courtesy, and profound sense of duty and obedience. Though they may exhibit too much of this quality, yet such a style is far preferable to that affectation of equality and parade of independence which will not admit even of that subordination which difference of official rank requires for its own preservation, but desires to merge all distinctions in the title of "citizen"—a title which, during the French Revolution, raised every human butcher to a level with the purest patriot.

To some extent, these French notions of equality obtruded themselves within American circles, and so far had the insolent appeals of Citizen Genet to the "Democracy" of the country betrayed men into forgetfulness of what they owed to the character of General Washington, and the dignity of the first magistrate, that, at a public dinner given by the "Democratic Society" at New-York, on the Fourth of July, the President was toasted as

"Citizen George Washington"

without an additional word indicative of respect for his station, or gratitude for his ser-

* Of course we are entirely at "swords' points" with our friend Mr. Chilton in this matter.—[Ed.]

VICES. It was even discovered that courtesy to the fair sex was incompatible with sound republicanism; and, although good democrats still married, the more scrupulous were careful that the public journals should designate the bride as "Citess," instead of "Miss." Such were the pains then taken to engraft these French extravagances on American manners.*

But there was no French familiarity (of the revolutionary sort) in the letters of old Winthrop Sargent. He entertained a profound respect for the President and his cabinet, and not only was not ashamed to express it himself, but made it the test of fidelity to government in others. The following letter is an exemplar of his respect for superiors:

"CINCINNATI, May 31, 1798.

"MY DEAR SIR:—I have just now received your favor of 4th instant. The confidence and good wishes of the President of the United States (personal respect and admiration even out of view) would be in a high degree grateful. I can know no greater happiness, with the sentiments that I possess for Mr. Adams, than is communicated by his honorary distinction of confidence; and next to my desire of aspiring to an elevated station in the mind of the President, I assure you, sir, is my wish of being thought well of by yourself.

"I am indeed, my dear sir, extremely sick, and perhaps too much debilitated to engage in those duties that might, even in better times, be to me arduous. However, my dear sir, you have expressed a wish that, if the appointment is made, I should accept it. This also I must suppose to be the desire of the President, and in consequence, I shall implicitly be governed by your instructions; if I can believe it amongst the probabilities that my state of health may possibly admit of my discharge of those duties which shall be assigned to me.

"Before the arrival of Governor St. Clair, I was making my arrangements for leaving the territory. . . . My situation was critical, and I had made up my mind upon a northern journey—a voyage to the sea-coast, as most congenial to my feelings. I have deposited the public records with a Captain

* Life and Writings of John Jay, vol. i. p. 319. (a.) (c.) A plea might be put in for this democratic adulation, if we remember the passion for titles which had begun to develop itself in other quarters, which in "His Serene Highness," etc., etc., sought to gratify the prevailing taste. (See some interesting pages on this point in Hildreth's History of the Administration of Washington; also, Garland's Life of John Randolph.) The disrespect to the President, involved in the title of "Citizen," has, perhaps, been equalled since. Witness, a few years ago, the dinner of the New-York Merchants, at which "Her Majesty the Queen" was toasted with loud applause, and "His Excellency the President," (Mr. Tyler,) drunk in silence.—[EDITOR.]

Harrison,* a young gentleman of Virginia, of education, son to a former governor of that name, long in the family of General Wayne in a confidential character, and who for seven years has sustained a fair, indeed unblemished reputation as a military officer. A few weeks since he resigned, and from faith in the goodness and propriety of his principles and his ability, I had placed in him the confidence before expressed; and I am sure, sir, that he will not betray any trust with which government may honor him. Indeed, I think him a very deserving young man.

"In case of my appointment, will it not be proper I should be furnished with a military escort? I hope government may be pleased to consider that my expenses at taking possession of the new country must be considerable, and make some provision therefor. The movement, not having been calculated by me, has not by me been provided for. I leave home, and those little conveniences that have enabled me to live on my former salary; and I believe no man in the administration will be unwilling to confess that a considerable sum of money must be actually due to me for my services to this country.

"I have the honor to be, with every sentiment of respect and esteem, sir, your very humble servant,
WINTHROP SARGENT.

"The Hon. Secretary of State."

In his next letter, the governor acknowledges receipt of his commission as Governor of the Mississippi Territory, and pledges himself most earnestly to "act with integrity, and to the best of his ability," but urges his bad health as a plea in advance of all omissions, &c. He also regrets being compelled to visit the territory without the *judges*, but expresses his intention immediately to depart. This letter is dated May 29th, 1798.

In a letter of the same date, he says:

"I do, indeed, accept your remarks in good faith, and you cannot confer on me a greater obligation than by continuing them. They may be honorable to myself and useful to the new government. The footing on which Governor Gayoso lived with the inhabitants of the Natchez,† it may not be exactly in my power to observe, from the difference between the American and Spanish appointments, and which must be as well or better known to you than to myself. It shall be my study to conciliate and attach all parties to the United States.

"The opposition to my appointment, and the news which had preceded the same, was

more than a little mortifying to me; as it was, however, only because I have been an eastern man, the effects thereof are done away with, and to declare myself honestly, (which, perhaps, I am too prone to,) I should have felt myself infinitely more honored in one single nomination to a dignified trust, than dishonored or mortified by half a dozen rejections, notwithstanding my high respect for many members of the Senate, and I every day thank God for this branch of our government. May I, sir, solicit you to present my acknowledgments to the President? His moments are too precious for my immediate address; and with all the respect and admiration that it is possible for me to feel for the most dignified character in the Union, I should, I believe, be always compelled to silence, because I would not hazard intrusion.

"I have the honor to be, my dear sir, &c.,

"WINTHROP SARGENT."

In a postscript to the foregoing letter, he says:

"You have had enough to do with them to know they are a very troublesome and expensive people.

"Are the Spaniards to be courted, (with due respect to ourselves,) or kept at a distance? Will it not be advantageous that an early attention be given to the land claims upon the Mississippi? I am told Gayoso was extremely liberal in grants ere his departure."*

In a letter of June 4th, 1798, the governor wrote:

"It will be my special duty to conciliate the good-will of the white and red people, and I will endeavor to perform it. The *latter* are, in numbers, very frequently at Natchez; and I believe, expect to be fed by a patronizing country, as well as to receive some small presents."

On the 16th June, the governor wrote, just before starting to Natchez, as follows:

"I mention the state of my health to impress on you more strongly the necessity that the officers of the government should speedily repair to the territory. *The presence of the judges cannot be dispensed with.*

"From the best intelligence I have been able to procure, there prevails in the country of our destination a refractory and turbulent spirit, with parties headed by men of perverseness and cunning. They have run wild in the recess of government, and every moment's delay in adoption of rules and regulations, after the ordinance, &c., shall be promulgated amongst them, must be productive of growing evils and discontent.

"I am anxious to know who is the first judge, and that he should be on his way to

* Since that time, President W. H. Harrison. The governor displayed, in this instance, knowledge of human nature; all his confidence having been fully redeemed by his protégé in his subsequent life.

† The reader has already learned what the governor was, at the date of this letter, ignorant of.

* None of these grants were valid, except what allowed by United States Commissioners.

this country. I trust he will be a *law character* of strictest integrity, of converse with all the states national, and a man unconnected with land speculations, and that shall make the duties of his office the primary consideration.

"The Supreme Court, from whose judgment there can be no appeal, should no more lack legal information than integrity. . . .

"I most earnestly pray that a regular communication by post may be established between the general government and Natchez."

On the 2d July, 1798, the governor was at the rapids of the Ohio, (now Louisville,) on his way to Natchez; and on the 20th August, wrote to the Secretary of State of the United States, announcing his arrival, and inclosing a copy of his address to the inhabitants of the territory. In this letter, as in many successive ones, he still earnestly prays for the appointment of judges, the want of whom he declares to be a source of great uneasiness. He says:

"I pray God Mr. McGuire may soon arrive, or some *law character*. In a court from which there is no appeal, most certainly there should be law knowledge. Judge Bruin, a worthy and sensible man, is, beyond doubt, deficient, and Judge Tilton cannot have had more reading and experience. Under these circumstances, might it not be advisable to make some compensation to some gentleman learned in the law, as an attorney for the United States and territory?

"To one act I have been constrained since my arrival here. . . . Mr. Cox was at large within the territory, and an armed party at his command. Before my arrival his coming was talked of among some few disaffected persons here; and that he was to assume the government of the state of Georgia. He is now in close confinement, but with every indulgence that a state prisoner could expect, for I am not disposed to torture even a criminal.

"We have no printing-office in this country. We are remote from all others; and under such circumstances I shall find it impracticable to diffuse a knowledge of the laws and other useful matter without the aid of government. A small travelling press, sufficient for half a sheet of post paper, which would give four pages, would be a blessing to the people of the territory, and I would myself contrive to manage it, if we may through your goodness be indulged.

"At this place the Choctaw Indians frequently visit, and are sometimes troublesome to the inhabitants, by killing their cattle, &c. It might be well to keep them in good humor by a little bread, beef and liquor, and some trifling presents, &c. . . . I cannot make advances myself, as my own expenses will be greater than I had an idea of: living is higher than I had expected, and even house-rent, I find, is estimated at \$300 a year."

We left Governor Sargent in great tribulation, owing to the inadequacy of the means afforded him by the general government, of efficiently administering the territorial government of Mississippi. At that time the remoteness of the territory from the seat of government rendered all communication between the two very difficult and infrequent. In his letters of September, 1798, the governor implored that Congress would establish facilities of intercourse between himself and the general government; and, in the following October, reiterates his complaints of the length of time since he heard from the Secretary of State; also, of his enormous expenses—to provide for which, he recommends the establishment of a revenue office at Natchez, where "foreign rum, sugar, and coffee were consumed in large quantities." He also recommended the appointment of an inspector of cotton, or a delegation of authority to himself, as "it might be made of some emolument to him, and would keep him in his disbursements, to which his pay was inadequate."* He also prayed for the appointment of judges, saying that Judge Bruin was indefatigable and meritorious; "but, for want of another judge, we are wretched. The people, smarting from our delinquency, will become restless, and I tremble for the consequences. Reputation is at stake, and every moment hazard increases." He also entreated the Secretary of State to transmit to him the laws of the different states, a seal, and stationery.

Against all these inconveniences, the governor could oppose only his own indomitable will, aided by his past experience in the North-west. He determined to be governor, not only in name, but in fact. He would not, like

"Albany, with feeble hand,
Sway borrowed truncheon of command."

He had been an officer in the army, under circumstances when the force of arms supplied the place of law. Placed now in a similar situation—suddenly transferred to a country, the inhabitants of which were, in his own language, "composed of various characters, and among them the most abandoned of villains"—he resolved to wrest the law to his authority, and exercise every power, however despotic, which the public safety might require. In one of his letters, deploring the want of judges, he says: "In consequence thereof, I am sometimes constrained to measures, that imperious necessity only can justify. They will, no doubt, be noticed by the malcontents, of whom there are not a few;

* At a still later period the governor wrote: "If some compensation is not made me for past services, my pockets will soon be empty of every thing but honor; and honor, you, as well as Falstaff, do acknowledge, will no more discharge the expenses of this government than set a broken leg."

and amongst them some most unprincipled scoundrels, who manage with great art and address."

"Soured by the seeming inattention of the government, which, no doubt, is insidiously blasoned by Spanish emissaries we are losing the inhabitants, while discontent is every moment increasing among those who remain.

"It is not strange it should be so; for, destitute of municipal law or efficient magistrates, our state is truly deplorable, and, until the arrival of the judges, it cannot be otherwise. Diffused over our country are aliens of various characters, and among them the most abandoned villains, who have escaped from the chains and prisons of Spain, and been convicted of the blackest crimes. It would be wise policy to provide for extirpating such from our territory. We have no prisons, and the vilest offenders calculate, therefore, with some certainty, upon impunity. I have done every thing in my power, *more*, perhaps; but, I trust, *necessity* will plead my justification. All, however, is inadequate, and very just cause of complaint will remain till some complete system for our good regulation be adopted, which I most fervently supplicate, for the sake of the people, for the fair reputation and dignity of the United States, and for my own honor and peace.*"

The foregoing sketch of the condition of the territory will incline the reader's mind to view with less censure the acts by which the governor endeavored to correct the evils by which he was surrounded, however despotic, at the present day, they would appear to be.

His first measure was the posting of all the soldiers at Loftus's Heights, "to save the men from debauchery, and for other reasons of national importance." This he recommended to General Wilkinson, who had recently arrived.

His next care was to provide a court-house and jail. In this scheme he proved unsuccessful. In a letter of September, 1798, he wrote: "At Natchez is a Roman Catholic church, which would make a convenient court-house; but having been consecrated, it would violate the feelings of *about a dozen families* of the holy Catholic religion, and be disagreeable to our neighbors, as it was built by the King of Spain."

"There is an appendage to the church, built by the King of Spain, which has been occupied by Captain Guion. The troops will leave, but reluctantly. I wish to appropriate this building to the purpose of a court-house."

* In a letter of the same date, the governor thus describes Natchez: "Natchez, from the perverseness of some of the people, the ebriety of the Indians and negroes on Sundays, has become a most abominable place. I must myself, in the absence of the judges, aim at some police, but it will be ineffectual without the aid of the garrison. Can you be good enough to command it?"

About this time the governor wrote to General Matthews, who "had come forward in behalf of a New-England company of land speculators," that all rights, derived from Georgia, to public lands, must be suspended till provided for by Congress; and in October, 1798, he issued a proclamation, forbidding all persons from surveying lands, marking trees, &c., on penalty of fine and imprisonment.

He recommended to government the issuing of orders, prohibiting aliens from travelling through the territory without passports. Subsequently, the governor issued a proclamation, directing "all persons, not actually citizens, inhabiting the territory, or some one of the United States, to report themselves within two hours after their arrival at any of the settled posts of the territory, to a conservator of the peace, under the penalty of imprisonment; and also prohibiting any person from entertaining or comforting any person neglecting to comply with this regulation." The same proclamation continued the power of justices to administer the oath of allegiance, &c., till the 30th November following. This was dated October 18th, 1798.

By a proclamation of the same date, he prohibited "giving or vending to Indians, within three miles of Natchez, any whiskey, rum, brandy, or other ardent spirits, till the 1st November following." It will presently appear that the latter proclamation was dictated by the apprehended approach of about two thousand Indians.

About this time, also, the governor ordered the arrest of John Callihan and William West, on suspicion of being associated with Zachariah Cox, who, (as appears in a former portion of this history,) had been imprisoned and had escaped; and in a letter to General Wilkinson, of November, 1798, he says, that he had ordered one — White to be arrested for "impudent observations." In a preceding letter to General W., he discussed the mode of recapturing Z. Cox, whom Governor Goyoso had refused to deliver up, and adds: "Could we rely on any of the soldiers in the fort, the affair would wear a good face, and promise us success." In November following, he offered a reward of \$800 for the apprehension of Cox, and also wrote to Mr. Welch, of the Indian Agency, informing him that Cox is to pass through the Indian nation, on his way to Tombigbee, and requesting his aid in arresting him. He also wrote a similar letter to Mitchell, the Indian Agent. Numerous were the schemes laid by the governor, during his administration, to recapture Cox, until the death of the offender, some time afterwards, deprived him of all chance of vindicating his own insulted dignity and the majesty of the law.

The greatest stretch of authority, which the governor was compelled to exercise, was the grant of power to William Dunbar, to grant

letters of administration of the estates of decedents, taking bond, with security, &c.; thus, by a single letter patent, creating an office, prescribing the laws for its administration, and appointing an officer to fill it. Royalty could have done no more!

About this time the governor entertained much apprehension of danger from a combination of the Indians and the aliens, whom he had previously denounced. In October, 1798, he wrote: "We shall not enroll in the militia more than eight hundred men. I almost despair of reconciling them to each other, or concentrating all their good-will to our government. Our frontier is exposed to invasion through the Spanish dominions, and also by the Indians, and sound policy should obtain for us some special indulgence."

In a letter to General W., same date, he says: "So soon as the enrolment (to which I expect much insidious opposition from base and designing men) shall have been effected, I propose to have, on paper at least, a select corps, equal to one half of the efficient force of the district, well armed and accoutred and officered, to act on the shortest notice; with these I propose to take the field, and co-operate with your excellency."

These preparations may have had an eye to the apprehended war which the governor was expecting to occur between the United States and France, and were, probably, accelerated by a rumor, which had just reached him, of the approach of about two thousand Indians towards Natchez, with the avowed object of demanding from him provisions and ammunition, sufficient to enable them to carry on a war against the Cadeans, an Indian tribe inhabiting Louisiana. This demand, being contrary to the treaty between the United States and Spain, he prepared to resist, and prevent the invasion of the Cadeans. In a few days a part of the Indians arrived—consisting only of two hundred warriors—and assembled at Concord, opposite to Natchez. They stated that they had received every species of injury and insult from the Cadeans, had patiently endured all for a long time, in the hope, founded on the assurance of Governor Gayoso, that they should obtain satisfaction without resorting to war; that, disappointed in this, they had embodied themselves, to the number of two thousand warriors, and proposed to cross the Mississippi and attack the Cadeans; that they were without arms and ammunition, or provisions, and relied on the bounty of their father, the United States, to supply them.

The address of the governor, in reply, had the desired effect, and the red wave which threatened for a while to overwhelm his precarious bark of authority, receded quietly beneath the influence of his Canute-like, but more potent eloquence. The Indians retired to their wigwams, and so far from ever after-

wards exhibiting any unfriendly disposition to the Americans, became their devoted friends and useful allies at a future period, when their co-operation was of vital importance to the interests of those states and territories bordering on the Spanish dominions. This happy result was mainly attributable to Governor Sargent's mild and conciliatory conduct towards them during the whole course of his administration.

The governor's military measures having been thus consummated, he turned his thoughts to the improvement of the territory by the arts of peace. In a letter of October 17th, to the Secretary of State, he had shown his solicitude on this subject, in which he hoped "that the United States would not forget the interest of a whole government, which, feeble, and on the confines of the United States, with jarring interests among the people, required a parent's fostering care." In the same letter, he prays "for the adjustment of land claims, provision for seminaries of learning and for religious purposes, together with encouragement in judiciously settling the country." Again, in December following, he wrote: "The population is small, very inferior to the adjacent establishment in Louisiana, and this consideration, in our distant and defenseless state, upon any occasion of disgust with the general government, might incline them to seek a reunion with the old province. Equitable decision on their land claims would produce a preference of the United States; but remaining a mere handful of men, their apprehension from red as well as white neighbors might, nevertheless, induce a conduct nationally injurious. To correct this, I would recommend the establishment of a land office, and encourage settlement to a considerable extent; for with our present number, we are in continual anxiety from the Choctaw Indians."

Deferring an account of the further measures of the governor for our next number, we will close this by an extract of a letter which grew out of his foreign relations. In December, 1798, a correspondence occurred between the governor and M. Tilhieme, commandant of Fort Moro; and in reply to a requisition of the latter, for the extradition of a fugitive from the Spanish dominions, the governor wrote as follows:

"Perfectly disposed to aid the operation of justice, in benefit even to nations unconnected by amity with the United States, and persuaded that it is their intention to consider Spain in a very favorable point of view, I am anxious promptly to deliver over to your justice the fugitives therefrom, and could not, for a moment, hesitate to surrender any atrocious malefactor, escaping from your government, and found within this territory, had not an asylum been granted to a most abandoned offender against the United States, within the

province of Louisiana; his excellency, the governor-general, believing the treaty made no provision to authorize his giving him up at my request. Having, however, no reason to alter my opinion then expressed, (save the example of his excellency,) I will demonstrate my love of justice by arresting Palmer, if to be found within my jurisdiction."

MISSISSIPPI.—A SKETCH OF THE GENERAL CHARACTER, AS TO SOIL, CLIMATE, PRODUCTIONS, &c., EMIGRATION, PROSPECTS, &c., OF MISSISSIPPI.—To a Journal devoted to the interests of the Valley of the West, matter touching any portion of it, I trust, will be acceptable. To an observer of the present day, indeed, it is somewhat strange that this section of country did not earlier attract the examination of the enterprising to the many points of interest to be found in its bosom, as well as the research of literary labor in regard to its earlier history. Surely it is a theme, in all its bearings, worthy of the attention of our ablest and wisest. The philosophic Frenchman, De Tocqueville, writing of our country, says: "The Valley of the Mississippi is, upon the whole, the most magnificent dwelling-place prepared by God for man's abode." And, in speaking of the Atlantic states, he says again that "the centre of power still remains there, whilst, in the backward states, the true elements of the great people, to whom the future control of the continent belongs, are secretly springing up." Scarce fifteen years have elapsed since the above was penned by a sagacious foreigner, yet they have served far more than to fulfil his remarkable prediction. And here I might say much on this which would be alien to the purposes of this brief article. As to the truth of it, it sufficeth that there is no more pertinent evidence needed for the moment than the establishment and success of the *Commercial Review of the South and West*, located at the great seat of their trade and power, and devoted to the complex and mighty interests growing up in their midst. May it continue to prosper, and remain worthy of the important duties it has assumed!

Among the fair sisterhood of states so beautifully traced out on the bosom of the great Valley of the West, there is none more interesting than the state of Mississippi, bearing, as it does, the name of their common boast, the Father of the American waters. Though among the first of the Western States admitted into the Union, Mississippi seems only for a brief period to have attracted much of the general attention. During the prevalence of the great land speculations, which are a part of the history of the West, its southern portion came fully into market, and, some years later, similar scenes were re-enacted at the sale of that fine tract of country in the northern part of the state known as

the "Chickasaw Cession." After the disposition of the greater part of the public domain at these sales, interest seems to have subsided as to the state, and to have turned aside in the pursuit after the rich loam of Louisiana, the new regions of Arkansas, and the varied expanse of the young republic of Texas. Among the many causes which might be assigned for the comparative neglect into which the state seems then to have fallen, I will mention only one. It is a conceded point, I believe, that our western land sales were at the same time the cause as well as the nucleus of much reckless speculation in which *bona fide* settlers could not participate, and which was managed and governed by gambling traders from all quarters of the United States. The state banks of the time, managed as they then were, furnished the food in this headlong race after fortune. Without a further waste of words, we have here the cause and the course of some of the most remarkable events in the private financial history of our people in the West. No land sales presented a higher degree of excitement, or more gigantic schemes of speculation, than in Mississippi; no state plunged with a bolder leap into the corrupt banking system of the times, and no where did more disastrous consequences follow in the train of either. The monopoly of large bodies of the public lands in the hands of a few, to the exclusion of the great mass of the people, and the profits of gambling, instead of the regular returns of honest industry, were the legitimate results of the one and the other. In the crash of 1836, '7, '8, and '9, an almost universal bankruptcy ensued amongst us, and some of the finest portions of Mississippi became partially depopulated. Then, in the breaking up of our miserable banking system, many unhappy consequences followed, the baleful effects of which have pursued the state, kept down its natural growth and prosperity, and are yet seen and daily felt in our courts of justice and our halls of legislation. The effects of these causes (proceeding from whence they may, for I will not undertake to say *here*) are very obvious. They have greatly impeded our increase in population; turned away from us the goodly tide of eastern emigration, and thus crippled the revenue, resources, and power of the state. In speculative schemes, the agricultural interests have been grievously neglected, and, in its infancy, our rich virgin soil has been squandered and exhausted. I will not dwell upon the abasing effects of this race after gold on the installment growth and character. It is to be seen amongst us; and there are many, rarely and nobly gifted, who look with vain regret on labors expended in the race for speculation and money, which if properly directed would have made them useful to their country, an ornament of general society, an honor to their

state, and enabled them to have left to their children a lofty heritage of fame. Lastly, from peculiar causes, the confidence of our sister states in our general policy and system of laws was entirely destroyed. But a great change has taken place. The old régime of Mississippi has passed away, and better times, I hope, are ahead of us. Our lands are now in the hands of earnest cultivators. The banking system is no more, and but one diminutive member of the tribe is left to remind us of the days of the "olden time." The laws and legislation of the state have become permanent and settled. We have at last gone through the fiery ordeal, credit and confidence have been restored, and the present population of Mississippi is almost unindebted. Our state is once more attracting the share of public attention to which her many natural advantages so richly entitle her. To these it is my present intention briefly to call the notice of your readers.

The state is comparatively small. It yet presents a great variety of soil, and is divided into many different districts. The upper portion of the state is generally known as North Mississippi, though the region thus designated includes a portion only of the north. This section of the state came into market and cultivation some twelve or fifteen years ago. The surface of the ground is rather rolling, but generally it is very clean; has an open, champaign appearance, and is beautifully wooded with oak, hickory, &c., devoid of undergrowth. The uplands produce very abundantly for a year or two, when they are apt to be ruined by heavy rains, the substratum of the country being sandy. The valley lands, as they are termed, are much more durable, the soil being heavier and darker, and are highly productive; but they are liable to be, and are frequently, submerged, acres at a time, under billows of sand washed from the uplands during the heavy freshets. Cotton has hitherto been the chief product; but as the soil is becoming exhausted, and the country colder from being more open, its cultivation will probably be in some degree abandoned, and attention given to lighter crops. It is considered a healthy country. The water, what there is of it, is very good; yet it cannot be said to be well watered. There is a small creek, called Cold Water, in its borders, and the Tallahatchee river makes from it. But for the scarcity of water, I presume it would be a good stock country, and also proper for the raising of small grains. The chief outlet of this region is by wagons to Memphis, Tennessee, which town it may be said almost to have built. Before the Chickasaw Cession came into cultivation it was a muddy village, and since, in a few years, through its wagon, grocery, and cotton trade, it has sprung into the fair and stately city which now salutes the eye of the

traveller from the brow of the ancient Chickasaw Bluff.

The settling of this region is one among the many remarkable events in the history of the rise of the Western States. Fifteen years ago it was an Indian wilderness, and now it has reached and passed in its population other portions of the state of ten times its age; and this population, too, one of the finest in all the West. Great attention has been given to schools and education, and here has been located the "University of Mississippi," so amply endowed by the state, and now just going into operation under the auspices of some of the most able professors from the eastern colleges. There is no overgrown wealth among them, and yet no squalid poverty; the people being generally comfortable, substantial, and independent farmers. Considering its climate, soil, health, and general character of its inhabitants, I should think no more desirable or delightful residence could be found than among the hills and sunny valleys of the Chickasaw Cession.

Another section of North Mississippi is called the "Prairie" or "Tombigbee" country, commencing in the extreme county of Itawamba, covering the north-east part of the state, and sweeping far down on the Alabama line. The country is uniformly level; presents an almost unbroken flat with scarcely a tree, covered by rank grass, dotted sometimes with pools and marshes, and intersected by dull, sluggish branches. The soil is a dark, heavy loam, coal black, and of surprising strength and fertility. The dirt is different from that of lower Louisiana in this, that it is more of an original and less of a depositary character; and also in being thick and highly adhesive, instead of light and *ashy*, as the former. It is also corrosive, and deeply impregnated with lime. The soil is a strong one, and certainly inexhaustible. The crop is, and ever will be, cotton, of which the yield is abundant when the rank grass of the prairie is overcome by cultivation, and the cotton is not ruined by the diseases incident to the strong nature of the soil. The black mud becomes excessively disagreeable in wet weather, and the rains are very heavy, and render transportation through the country, as well as its cultivation, very laborious. The yield of corn is luxuriant and abundant.

This region, though lying by the Chickasaw counties, finds its market at Mobile, by means of the Tombigbee river principally; a fine stream, and navigable for good boats seven months of the year. The head of its navigation is Aberdeen, a thriving town in Monroe county, sprung up in a few years, and already a place of very heavy trade; the third shipping point in the state, having cleared near forty thousand bags of cotton the past season. The border counties down the Alabama line change from the prairie and partake more of

the character of the Chickasaw Cession. It is a beautiful and healthy range of counties, finely watered, and for several years fast increasing in population and growing in wealth. Cotton grows well, and the lighter grains abundantly, which is wagoned to Gainsville, or some shipping point in Alabama on the Tombigbee river, and thence to Mobile.

A large district of the state is known as East Mississippi, which really includes the south-east and part of the southern portion. Though one of the oldest, it is one of the most thinly settled portions of the state. The people of East Mississippi boast, and with reason, of their good health, pure bracing air, and delightful water. The character of the land is mixed—some poor and some very rich—broken hills and fertile valleys. Cotton is produced, though to no great extent; corn and small grain abundantly; sometimes rice in small quantities. Fruits are plenty. This region is somewhat famous for cattle, in which a chief part of the possessions of many of its citizens consists; hence has often been applied to them the familiar sobriquet of the "cow counties." The country is indeed highly *pastoral*, and possesses many of its pleasant characteristics. Without the soil or the market for the sole cultivation of the heavier southern staples, it rejoices in other advantages contributing perhaps more nearly to the general happiness of its people. Scattered thick here and there are to be found lands of the most fertile and generous cast; and there cannot be met with a more independent or hospitable community than among the East Mississippians. Among their fertile valleys and on their green hills is to be found "many a cozy nook and dingle, bushy dell and bowaky burn fram side to side," where are to be seen the bright eye and rosy cheek of health, and to be felt the warm heart and generous hand of a frank and manly people.

A small portion of their trading is done at Jackson, the *present* terminus of the Vicksburg railroad, a small portion down Pearl river to New-Orleans, and the greater part to the city of Mobile.

The portion of the state bordering on the sea-shore, with its bathing, fish, oysters, and pleasant summer retreats, is well known to the dust-covered denizens of New-Orleans. It is becoming a place of resort, as well for its own people as for the citizens, and bids fair soon to rival the famed gatherings of Newport and Cape May. Back from the sea-coast is generally a sandy, broken tract, covered by quantities of fine pine. The turpentine business is already attracting attention; application has already been made by individuals to the general government for grants of public lands there situated, in order to test the business and thereby enhance the value of the residue. A large factory has been opened, and others are preparing for the business.

The position and material favor such a trade, and in a few years it will no doubt become heavy and profitable, and furnish a fine investment for capital.

The south-west and country above it, though the oldest, is the portion of Mississippi least known to the writer. The soil is rich, and the population numerous, wealthy, and highly distinguished for intelligence. The course of trade of a portion is through Bayou Sara, on the West Feliciana railroad, and the whole to New-Orleans through some point on the Mississippi river. Among others, may be mentioned the ancient and time-honored city of Natchez.

I will now direct your attention to the only remaining section of Mississippi which I can notice. Commencing some fifty miles below the mouth of the Yazoo river, inclining to the interior for about one hundred miles in a line gently circling northward, up through the centre, then diverging to the north-west to a point below Memphis, including the counties of De Soto and Panola, is to be found as noble a sweep of country as any in the world. It is washed by the Mississippi from Memphis to Vicksburg, and is intersected by the Yazoo, its head waters and tributaries, throughout its greatest extent. The facilities for market are unequalled. The Yazoo river, running, as we have said, through nearly its whole extent, is an excellent stream, affording steam navigation sometimes as high as the south-west corner of Marshall county. The soil is of the most productive character, being, as it is called, *swamp land*. It possesses all the strength of the prairie lands, without their sticky, adhesive, and corrosive nature. This region of our state has come into cultivation at a comparatively recent period, it having been heretofore considered damp and unhealthy. This impression is fast losing ground, and the cotton planters, deserting the rolling uplands, are fast pouring in upon the "swamp." Indeed, the impression of the sickness of the South generally has been rapidly losing ground for some years back, and that blessing is now sought with as much confidence on the "swamp lands" of the Yazoo and the Mississippi as among the hills and plains of Carolina and Virginia. Population of the very finest character is being attracted hither, and in a few years it must be the wealthiest and most flourishing part of Mississippi. When other portions of the state shall, in the lapse of time, become worn out and exhausted, (as they will, unless our mode of cultivation is greatly improved,) it will be the store-house, the granary, the Egypt of the surrounding country. One drawback on these lands, however, is their liability to overflow from freshets in the Mississippi river. This danger is diminishing every year, and as population increases, levees, good and substantial, will be built. An effort was made

at the last session of the Legislature to pass a levee bill, which failed, but which will be renewed with better success at the next session. Some years ago Congress donated to the state of Mississippi 500,000 acres of land, to be applied to purposes of internal improvement. Most of these lands are located within the district we are speaking of. Under an act of the Legislature they were advertised to be sold on the 1st of January last, by the Secretary of State, and Planter's Bank bonds and coupons to be received in payment therefor. There is a considerable quantity of government land here also vacant, and selling for the minimum price. Very heavy tracts of land are here also held by speculators, whose necessities and our tax laws are forcing to sell. The natural advantages of these lands are appreciating them in value every year, and the present is probably the most advantageous period to purchase which will ever occur again. I may also mention that there are considerable quantities of these lands owned by old commission houses and foreign banks, and no doubt could be purchased of them low.

The section last spoken of embraces the counties of Yazoo, Sunflower, Washington, Bolivar, Coahoma, Tunica, Tallahatchie, and a portion of De Soto, Panola, Yalobusha, Carroll, and Holmes, and is generally known as the region of the "River counties."

Mississippi can as yet boast of but few works of internal improvement. There has, however, for a few years past, sprung up a strong disposition to carry out something of the sort. The idea of connecting Memphis by a railroad, running through North Mississippi, with the Alabama, Georgia, and Carolina road, has been broached and advocated through your journal. The plan is feasible, and is every day engaging the attention of men who will accomplish their undertaking.

For several years we have had a railroad from Vicksburg to Jackson. This road has long been graded twelve miles east of Jackson to Brandon. By an act of the last Legislature, our two per cent. fund, donated to us by Congress for such purposes, was appropriated to extending and completing this line to Alabama. Commissioners were appointed for the purpose, who are now actively engaged in so doing. The road will soon be completed to Brandon, and if a small amount of foreign capital can be attracted to it, it will be completed so as to connect with the Atlantic at Charleston. The recent addition of Northern Mexico to our Union, the immense mineral wealth, and the convenience of its ports and harbors toward the rich trade and commerce of the Orient, render the question of a land connection between the Californias and the Atlantic a matter of pressing and glorious interest. It is, however, too import-

ant a theme to be discussed here. At an early day, if agreeable to you, I will take up the subject, and from an examination of a mass of papers heretofore before the United States Senate, lay before your readers a sketch of the different projects connected with the above.

There is one cause which at present I will mention as operating against the resources and population of Mississippi: it is the heavy amount of government lands remaining unsold within her borders. By the Report of the Commissioners of the General Land Office, they amounted, on the 30th June, 1845, to 10,409,084 acres. Of these, there had been in market *five* years, 1,018,114 acres; *ten* years, 451,390 acres; *fifteen* years, 2,974,097; *twenty* years, 934,131; *twenty-five* years, 894,424; *thirty* years, 2,924,172; and *over thirty* years, 1,222,706. These lands are all held at a minimum of \$1.25 per acre, at which price they can never be sold, and will remain a heavy incubus upon our prosperity. The subject calls loudly for the action of Congress, and was ably urged upon it by General Shields in the Report above named. Under the graduation system, of about 4,344,725 acres, in nine years was sold 3,469,320.92 acres; and the balance is and will be soon disposed of. Every consideration demands strict legislation, economy, clemency to the states in whose borders these lands lie, and justice to the mighty wave of the frontier population, sweeping onward to the base of the Rocky Mountains and the shores of the Pacific, and extending the laws and institutions of our country across the continent. The removal of all difficulties in the way of the occupancy of our public lands has always been a favorite idea with me, and, in connection with it, I cannot here help alluding to a public man whose official career is now nearly run—one whose untiring industry and unvarying accuracy have made him famous, whilst his far-reaching sagacity and comprehensive ability have shed a mighty flood of light upon all the financial and industrial interests of his country. I allude to Robert J. Walker, of Mississippi; and I cannot better conclude this subject than by quoting his own language in reference to it. "Reduce," says he, "the price which the laborer must pay for the public domain; bring thus the means of purchase within his power; confine the sales to settlers and cultivators, in limited quantities; preserve thus hundreds of millions of acres for ages to come as homes for the poor and oppressed; reduce the taxes by reducing the tariff, and bring down the prices which the poor are thus compelled to pay for the comforts and necessities of life; and more will be done for the benefit of American labor than if millions were added to the profits of manufacturing capital."

There is much else which I could well

allude to in connection with my state, but I am warned to conclude. I can only say that, to my view, no state has fairer and brighter prospects before her in the future, if prudence shall rule the action of her people, and wisdom guide their counsels and conduct.

MISSISSIPPI—Resources of.—A paper on the other side of the ocean has been discussing the affairs of Mississippi with rather a free hand; but as the writer does great justice to the resources and wealth of our sister state, we will extract some part of his remarks:

"The territory included in the state of Mississippi enjoys a preëminence even among the most favored of the communities which recognize the federal government of Washington. It takes its name from the great river which drains into the Mexican Gulf the superfluous waters of the whole middle region of the North American continent; and for two hundred and sixty-five miles along the lower and the richest line of that river, Mississippi occupies its western bank. It is daily enriched, without any exertion of its own; for every circumstance and every accident which contributes to swell the population who dwell on the higher branches of the Mississippi, the Missouri, and the Ohio rivers, increases the traffic on the low waters of that mighty confluence of streams. The state of Mississippi is the Holland of the central regions of North America. She is placed on the delta of the chief lines of water communication, through which alone the larger part of the external commerce of those regions can find a passage, and by which the greater portion of their imported commodities must be conveyed. The Dutch have become rich and illustrious, notwithstanding that their country is little more than a sand bank, and a mere speck on the map of Europe. But Mississippi occupies a surface equal to the whole of England and Wales. In point of fact, she is one of the largest states of the Union; and the natural resources of her soil have excited the admiration and amazement of every person who has examined them. These are the general outlines of the picture; and, when we turn our attention to the details, we arrive at equally striking results. Between 1830 and 1840, the population of Mississippi very much more than doubled itself; and when the census of the present year shall be completed, we entertain no doubt that, in point of numbers, the citizens of that state will be found to occupy a position so favorable, as to be in some degree disproportionate to their general standing in the federal commonwealth. Between the years 1840 and 1846, the revenue derived from the sale of her public lands increased nearly seven fold; and it must be borne in mind that, among the new western states, the rapidity with which the public domain is ab-

sorbed by fresh settlers, is one of the strongest proofs of substantial progress. Notwithstanding, however, this great increase in the demand for land, the state had still on hand, on the 30th of June, 1846, no less than 10,409,034 acres of surveyed and registered lands, awaiting the appearance of purchasers. And if we estimate the value of these at no more than the very moderate price of two and a half dollars per acre, (the rate assumed by the commissioners of the state,) it will appear that Mississippi possesses, in her unappropriated public domain alone, a fund equal to five and a half millions of pounds sterling, or more than five times the principal, and more than a hundred times the interest of the debt. But further, we have at this moment before us a copy of the official budget of Mississippi for the years 1846, '47 and '48; and what are the prominent facts which these documents disclose? Not, certainly, that the people of Mississippi are poor and helpless. In 1846, the number of taxable acres in the state was 15,232,389; and in 1848 the area of assessment has expanded to 16,019,488 acres; that is to say, in two years it has increased five per cent. The whole amount of public taxes annually collected within the state was under \$380,000, or £78,000; and the burthen of these was limited to an infinitesimal assessment, on most of the principal kinds of real and personal property. We find, for example, entries of the amount of duty levied on pleasure wagons, race, saddle, and harness horses, gold and silver plate, pianos, pistols, bowie knives, 'slaves under sixty years,' and 'free male negroes.'"

MARYLAND.—HISTORICAL EVENTS.—GOVERNMENT.—RESOURCES.—IMPROVEMENTS.—COMMERCE.—CITY OF BALTIMORE, &c.—The state of Maryland derives its name from Henrietta Maria, the wife of Charles I., by whom a charter was granted to George Calvert, the first Lord Baltimore. The charter was issued on the 20th of June, 1632, and assigned to the grantee all the territory lying within certain prescribed limits, with extensive jurisdiction and powers of government over it. It was distinguished for its liberal and democratic character in an age which was proverbially illiberal and tyrannical. The law-making power was vested in the Lord Proprietary jointly with the people, or their representatives. The Proprietary could only act alone in cases of sudden emergency, when the people or their representatives could not be easily assembled. The right of exemption from taxation by the crown, except with their own consent, was clearly stipulated, together with many other *privileges*, as they were then called; but which, in this enlightened age, are justly considered the inalienable rights of man. The fires of Protestantism, which were lighted up by Luther and Calvin, were burn-

ing with undiminished intensity in England as well as on the continent; and the severity and cruelty of the laws of England towards the Catholics rendered it impossible for them to remain in their own country, and enjoy that greatest of earthly blessings, the liberty to worship our Maker according to the dictates of our own conscience. It is well known that religious persecution and the love of gold were the inciting causes to all the emigrations from the old world to the new. But the early settlers of Maryland had to encounter difficulties of the same kind as those which compelled them to fly their own country. Maryland having been included within the limits of the royal government of Virginia previous to the issuing of her charter, one William Claiborne obtained from the governor and council a license to trade with the Indians on the Chesapeake. Taking advantage of his position, he excited jealousies on the part of the Indians towards the Marylanders, by representing them as Spaniards and enemies. But he failed in his insidious attempts, and afterwards created an open rebellion, in which he was again thwarted, and compelled to fly first to Virginia, and then to England, where he was tried and convicted of treason.

The first General Assembly of the freemen of the colony was convened at the town of St. Mary's, in 1635. A considerable portion of the records of their proceedings was destroyed by fire, so that but little of them is known. The second Assembly was convened in 1638. In some respects the constitution of those early legislatures differed from those of the present day. The charter entitled every freeman to take a share in the making of those laws by which he was to be governed. As it was inconvenient to assemble at a given time and place persons who were few and far between, each one was allowed to vote by proxy, so that it sometimes happened that one individual cast a dozen votes. The Proprietary, however, was invested with the power of summoning by special writ those whose presence he particularly desired. At a later period, two burgesses were elected from every hundred individuals; but each individual had the right, if he thought proper to exercise it, to claim his seat in the legislature. This right was, however, taken away by the General Assembly itself; and the council, the delegates from the several hundreds, and those who were summoned by special writ, constituted this body. The Proprietary (or governor) could obtain the control of the Assembly by adding to it a few of his personal friends. They all sat at first in one house, but were afterwards divided into two, called the upper and lower, somewhat like those of the Lords and Commons of Great Britain; the council appointed by the Lord Proprietary forming the upper, and the delegates of the people the lower. It was during this session that the colonists began to pave

the way for the more just and equitable system which lies at the foundation of the present constitution of Maryland. The old leaven of aristocracy and monarchy which pervaded the government, began to receive a blow which, by frequent repetition, compelled the ancient system to yield to the wants of the age and the stern spirit of liberty, which were so heroically displayed during the eventful crisis of the great Revolution.

Lord Baltimore attempted to compel the colonists to accept the system of laws which he had digested, and to annul the acts of the legislature, because they were not framed by himself. The people were convinced that the Proprietary had no other than the veto power, and vindicated their rights by rejecting the whole system. The Lord Proprietary vetoed all of the bills that were passed, but afterwards abandoned it, preferring the welfare and prosperity of the colony to his own individual privileges, and sensible that the power of negating any bill of which he disapproved was quite sufficient to protect his rights and authority in the province.* But Maryland was destined to encounter other difficulties besides those of a civil character. Although religious freedom was expressly granted to them by the charter, no sooner had the contest between the king and parliament broken out in England, than the spirit of disaffection began to show itself in the colonies. The bigoted Puritans who were driven from Virginia on account of their intolerance, fomented the dissensions which began to prevail between the various Christian sects. Their strength increased with the success of the parliament, until finally they attempted the reduction of Maryland by additional reinforcements from England. Charles the First had been recently executed by the republican party. It was found at the next General Assembly that the partisans of the commonwealth were in the majority. Parliament had, in the mean time, passed an ordinance for the reduction of Maryland. Commissioners were appointed, who, with armed vessels and a regiment of soldiers, proceeded to wrest the government of the colony from the hands of the people, and required that they should conform to the laws of the commonwealth. After a determined resistance on the part of the Proprietary, his power was overthrown, but not until a bloody battle had been fought, and some of the most distinguished men of the colony had been killed. As soon as they took possession of the province, an Assembly was called, and it was prohibited that any Catholic or royalist should vote for or sit therein as a delegate. Their first act was to pass a law declaring that the members of the Catholic Church would not be protected in the province, and at the same time denouncing "prelacy,"

* Bosman.

as they denominated the Church of England. The Puritan rule lasted for about six years, when Cromwell died, and Charles II. was restored to the throne of his ancestors. The government of the Lord Proprietary was again renewed in Maryland, but it was destined to undergo many severe trials before it was enabled to continue the even tenor of its way. The same conspiracy that had overthrown the power of the Puritans, set about undermining that of the Lord Proprietary. At the session of 1659, the House of Delegates demanded that the governor and council should no longer sit as an upper house, and claimed for itself the rights of supreme judicial and legislative power. The governor, who had been appointed (in the absence of Lord Baltimore) with two of his council, took his seat in the lower house. "The upper house was then declared to be dissolved, and the governor, having resigned his commission from the Lord Proprietary into the hands of the Assembly, accepted from that body a new one in their own name, and by their own authority. To secure obedience to this new and almost republican government, an act was passed declaring it to be a felony to disturb the existing order of things, and the people were commanded by proclamation to acknowledge no authority except that which came immediately from the Assembly or from the king."

For about thirty years after these events, the government preserved a character of stability. The colony increased in inhabitants, productions and commerce, and enjoyed all those blessings which flow from a peaceful and prosperous rule. The historian apologizes for the dull and uninteresting epoch in which any event is deemed worthy of being recorded. Gibbon makes the same apology in treating of the reign of the Antonines. There were only a few sanguinary battles, a few terrible crimes or astounding calamities; civil wars were without bloodshed, and the colony devoted itself to the increase of its internal prosperity. A mint was established for coining shillings, and taxes, in the shape of tobacco, were imposed for the proper maintenance of the government. "The mode of payment of port duties is worthy of notice, as indicating the wants of the times. Every vessel having a flush deck fore and aft, coming to trade in the province, was compelled to pay one half pound of powder and three pounds of shot for every ton burthen. To insure the circulation of the new coinage, every householder was compelled to take from the mint ten shillings for each taxable person in his family, for which he was to pay in tobacco, at the rate of two pence per pound." When Philip Calvert assumed the government of the colony, in 1680, there were twelve thousand inhabitants. It increased to sixteen thousand in the next five years. In 1671 it amounted to twenty thou-

sand. They began about this time to enlarge the number of counties. There were only a few towns; St. Mary's and Annapolis were the only ones of any importance. A majority of the people were planters and farmers. They obtained their manufactured articles from the mother country. At the session of 1663, the Assembly were engaged in laying the foundation of a system of laws, many of which continue to exist to the present day. The growing wealth and importance of Maryland excited the avarice of Charles II. James II. ordered a writ of *quo warranto* to be issued, to show cause why the charter should not be forfeited. But Charles died, and James was deposed. William and Mary ascended the throne. Soon after this event, a conspiracy was formed to overturn the government, and to abolish the Catholic religion. The king sustained the acts of the revolution, and the province continued under the administration of the Convention of the people, who requested the king to take the government of the colony into his own hands. Sir Lionel Copley was sent over to take command of the province as governor. The Convention was dissolved, and a General Assembly was summoned to meet at the city of St. Mary's. Its acts of severity towards the Catholics and dissenters are blots upon the history of this period. The royal dominion in Maryland lasted for twenty-five years. Nothing is worthy of particular note, except that the crown had already begun to make encroachments upon the liberty of the people. The British Parliament desired to destroy the charter, and to effect the reduction of Maryland, as well as the other colonies of Massachusetts, New Hampshire, Rhode Island, Connecticut, the Jerseys, and Pennsylvania. They charged Pennsylvania with being a receptacle of runaway slaves, and the Jerseys with being the resort of pirates. In 1715 the reins of government were again surrendered to Lord Baltimore, and the Parliament again attempted to take away their charter; but the colonies were successful in remonstrating against the injustice of it. The struggle between the aristocracy and the democracy began to be more decided than ever. Although there was no actual breach between them, a war of paper bullets preceded that of lead. Petitions and protests, resolutions, addresses and proclamations ensued for several years, which resulted in the triumph of the democracy. In 1739 the Assembly resolved that the duties levied by the Proprietary were unjust and oppressive, and protested against certain usurpations and privileges claimed in the creation of new offices without the consent of the Assembly. The tonnage and tobacco duties were a standing subject of complaint and resistance between the people and the Proprietary, until the Stamp Act and Tea Duties "closed all controversies, and removed all griev-

ances." In 1744, a treaty was concluded between commissioners appointed by the governor and a powerful tribe of Indians called the Six Nations, by which three hundred pounds of current money was agreed to be paid to them, on condition that they would relinquish all claims to any territory within the limits of Maryland. The Assembly projected the building of towns and cities, but very few of them grew to any importance. The cities of Baltimore, Annapolis, and Frederick, are the only ones that are now known. The population of the province had begun to increase rapidly. In 1748, the number of inhabitants was estimated at 130,000 souls. It increased in five years after to 164,188. The mineral and agricultural resources of the soil began to be developed, and an establishment was made for the manufacture of linen and woollen stuffs for common use, and for the clothing of servants and slaves. Grants of land were made to those who would erect watermills and forges for the working of the copper mines. The making of wine was also attempted. Wheat and Indian corn were largely exported, but tobacco was the principal staple. Free schools were established and supported by general taxation. The currency was in great disorder. An issue of paper money was resorted to on the part of the government, but ultimately failed. There were also disputes with regard to her boundaries, which have never been settled to the satisfaction of the people of Maryland. There is nothing worthy of particular mention from this time until the revolution. There were frequent contests between the English and the French, who had conceived the idea of connecting Canada with Louisiana, by constructing a chain of forts along the Mississippi and Ohio rivers, which passed through a territory to which the English laid claim. As Virginia was principally interested in the controversy, the governor dispatched Washington to protest against the proceedings of the French commandant. What courage, zeal, and perseverance he displayed in the discharge of his duty, and what un fading glory he obtained not long after, form one of the brightest pages in the annals of our country, and is indelibly impressed on the mind of every American citizen.

The two principles of aristocracy and democracy which were contained in the original charter, began to be developed in broader and more decided characters. The right of taxation, which was claimed by the upper house, was denied by the representatives of the people, who claimed the exclusive privilege of framing bills for raising money. Meanwhile the colony was rapidly increasing in population, which spread themselves to the utmost limits of the province. The soil was rich, and intersected by navigable streams, and possess-

ing great mineral resources, which only required industry and independence to develop to the fullest extent. Maryland took an active part in opposing the stamp act, as well as the duty on tea. Her heroic conduct during the war of the Revolution is so well known, that it is unnecessary to dwell upon it. Suffice it to say, that no state was more patriotic, and that none rendered more distinguished services in obtaining our independence. After the Revolution was over, the finances of the country were in a very disordered condition. The treasury of the United States was empty. Congress was burdened with a debt of forty-two millions of dollars, and several of the states were considerably involved. Maryland was one of the first states that passed a law authorizing Congress to levy the required duties on exports and imports, to cover the interest of the public debt. With a view to enable her to recover from the effects of the late struggle, a company was formed for the purpose of constructing a canal from the Pennsylvania line along the Susquehanna to the tide water, and incorporated in 1784 under the name of the Proprietors of the Susquehanna Canal. The Potomac Company was soon after organized, to open a convenient route for travel and transportation between the Atlantic and the growing settlements of the West. Virginia and Maryland united in this enterprise, and General Washington was chosen the first President. The company was afterwards merged in the Chesapeake and Ohio Canal Company. A scheme was also proposed for effecting an inland communication between the Delaware and Chesapeake Bay. The city of Baltimore, about this time, received a new impulse, and the enterprise of its merchants began to display itself in its increasing commerce and population. In 1782 its population was 8,000 inhabitants; it now numbers about 167,000, and is the third city in the Union. The cause of science and learning were not neglected. A college was established at Chestertown, called Washington College, and another in connection with it at Annapolis, called "St. John's College." The great subject of political interest at this time was the formation of the Federal Constitution. The democratic party was inclined to strengthen the state authority at the expense of the general government, or more properly speaking, was not willing to surrender to the general government more power than was necessary to carry its provisions into operation. The federal party were for consolidating the government, in order to preserve security at home, and respect from abroad. Whether the Constitution will continue to endure the severe shocks it has already received, and which is now agitating the republic to its centre, remains to be seen. Nothing but a strict adherence to

its provisions, and a spirit of mutual forbearance, will preserve it as the palladium of our safety. *Eato perpetua.* In 1790, the District of Columbia was ceded by Maryland and Virginia to the United States, of which Washington was to be the seat of government. A contest had arisen in Maryland for the enlargement of the right of suffrage. It became the leading topic in state politics, and elections turned upon it. After long and angry discussions in the session of 1802, the confirmatory act was passed. That odious restriction upon the freedom of elections, the *rise voce* vote, was removed, and the ballot-box substituted in its place. The old judicial system was also abolished, and the present one adopted.

During the war of 1812, Maryland acted with her usual gallantry; and the battle of Bladensburg and North Point will be ever memorable in the annals of our country. After the war, she turned her attention to internal improvements. The public schools were to be supported by a permanent fund, which the banks agreed to pay, on the renewal of their respective charters. The system was afterwards superseded by the formation of the primary school organization in 1825,—the organization of which was considerably enlarged. We copy the following remarks from McSherry's History of Maryland, a work recently published, and of high authority:

"The immense mineral resources of Western Maryland, the rich mines of iron ore, and the inexhaustible supply of coal, which its mountains contained, made it a matter of peculiar importance to Maryland, that the designs of the Potomac Company should be completed, irrespective of the growing trade of the West. A water communication into the heart of the mineral region, affording the cheapest means of transportation of such heavy articles, was almost absolutely necessary to develop fully its immense wealth, and pour it into the markets of the Atlantic. But it was found, in progress of time, after repeated efforts, that the mode of navigation proposed by the Potomac Company was insufficient and unworthy of the great object in view—the securing the trade of the West; and another and nobler work was contemplated. It was proposed that the Potomac Company should surrender its privileges to a new corporation, to be formed for the purpose of making a canal along the river to its head, and thence to the waters of the Ohio. The Legislature of Maryland approved of the design, and a Convention was called at the city of Washington, of delegates to be chosen by the people of the different counties in Virginia, Maryland, and Pennsylvania, to consider the best means for effecting so desirable an object. Delegates from fourteen counties in Virginia, one in Pennsylvania, and eight in Maryland, besides a full representation from each of the District

cities, attended on the 23d of November, 1828. It was resolved that a company should be formed to construct a navigable canal by Cumberland, to the coal banks, on the eastern side of the Alleghanias, and thence, as soon as practicable, to the highest point of navigation on the Ohio, or Monongahela; and, as it was contemplated to be finished by the joint efforts of the United States government, Maryland, Virginia, Pennsylvania, and the subscriptions of private stockholders, it was proposed to designate it as "the Union Canal," but its present name, the Chesapeake and Ohio Canal, was finally adopted. During the sessions of the Convention, a communication was presented from two delegates from Ohio, proposing a further extension of the work, by a canal from the Ohio, through that state, to the great lakes on the north; which portion of the design was finally, by the state, unaided.

"In conformity with the recommendations of this body, an act was passed by Virginia, on the 27th of January, 1824, and subsequently confirmed by Maryland, Pennsylvania, and the United States, to incorporate the Chesapeake and Ohio Canal Company. Maryland, wisely looking to the interest of its commercial metropolis, claimed and obtained the right of constructing, through any portion of the District of Columbia, a lateral canal, to terminate at the city of Baltimore. It further insisted on the power, and maintained the expediency, of the general government's fostering this great national work, and aiding in its completion. It authorized the state treasurer, in its name, to subscribe five thousand shares of stock, at one hundred dollars per share, on certain conditions.

"The necessary legislation having been thus effected, a second Convention assembled at Washington, composed of numerous delegates from Ohio, Pennsylvania, Maryland, and Virginia, who approved of the charter thus tendered to them. The books were opened by the commissioners appointed for that purpose; and the requisite amount of stock having been taken, the stockholders, in June, 1828, organized and formally accepted the charter. The United States subscribed for ten thousand shares of stock, and Congress authorized the District cities to become stockholders. They accordingly took an aggregate of fifteen thousand shares. The amount of the subscriptions of Virginia was only seven hundred and seventy-seven shares. These subscriptions, together with the stock taken by individuals, brought the sum total to thirty-six thousand and eighty-nine shares, being a capital of \$3,608,900. It had been sanguinely estimated, that the whole work could be completed to Cumberland on the scale at first contemplated—forty feet wide at top, twenty-eight feet at bottom, and four feet deep—for \$4,400,000. The dimensions, however, were after-

wards increased, at the suggestion of the United States government, to six feet in depth; and in width, ranging from sixty to fifty feet. The route was immediately selected, and the work commenced.

"While these measures were in progress, the people of Baltimore began to entertain fears that the work would interfere with their prosperity, and build up the District cities at their expense. They doubted the feasibility of constructing the lateral canal; and a railroad to the waters of the Ohio was determined upon. In February, 1827, a public meeting was called in the city, and a memorial preferred at once to the Legislature. It was asserted that the route of the railroad was the only practicable one—that is, shorter by one hundred and forty miles than that by the canal, and that it could be opened at an expense less by seven millions of dollars. In ten days after the application, a charter was granted by the Legislature.

"The railroad company were allowed to pass along on a line parallel with the canal to Harper's Ferry, at which point it crossed to the Virginia side. The state subscribed for five thousand shares of its stock, and authorized the city of Baltimore to subscribe for thirty thousand shares. Not long after, 'The Baltimore and Susquehanna Railroad' was projected from Baltimore to York. A branch of the Baltimore and Ohio road was turned towards Washington, and a lateral road to Annapolis was connected with it. The failure of the canal, beyond Harper's Ferry, for want of funds to continue it, rendered it necessary for the Legislature to take the matter into consideration. In 1835, it provided for a subscription of three millions to the Chesapeake and Ohio Canal—three millions to the Baltimore and Ohio Railroad—half a million to the Maryland Cross-cut Canal to Baltimore—half a million to the Annapolis and Potomac Canal—and one million to the Eastern Shore Railroad. The amount of the state's interest in the canal in 1839 had swollen up to the sum of \$7,197,000. The Tide Water Canal Company, and the York and Wrightsville Road, was supported by state bonds, for which the company's tolls were pledged.

"Agricultural societies were formed throughout the counties—a state association was assembled—an excellent journal* established to advocate the cause of the noblest of all pursuits—the education of the soil. Men of enterprise turned their attention to the restoration of these barren wastes, and soon presented to the astonished eye of advocates of the ancient system, the 'old fields suddenly renovated by the power of lime and guano, and

composts judiciously applied, and blooming and producing with something like their pristine fertility. The spirit of improvement did not rest with these. The man of smaller means imitated their example, and profited by their experience. The barren wastes of the last generation are becoming smiling fields, groaning with yellow harvests, and rich meadows waving with sweet-scented grasses; the voices of a thriving rural population sound like music once more in the long-deserted ranges; and the last 'old field' of Maryland will soon yield to the onward progress of agricultural improvement."

Although Maryland is among the small states of the Union in point of territorial dimensions, her geographical position is one of the best. She is surrounded by rivers and bays which discharge the products of several states into her bosom. Her soil is rich and fertile in the growth of grain and tobacco; and, what is strange, the mineral resources of copper, iron, coal, and even gold, are to be found within her borders. It is well known that lands which abound in mineral ores are generally very barren.

The property of the state consists of the following items:

PRODUCTIVE PROPERTY OF MARYLAND.

Stocks of the Farmers' Bank of Maryland.....	\$190,000 00
" Bank of Baltimore.....	174,000 00
" Mechanics' Bank of Baltimore.....	46,500 00
" Union Bank of Maryland.....	31,800 00
" Hagerstown Bank.....	25,000 00
" Commercial and Farmers' Bank of Baltimore.....	21,666 66
" Farmers' and Merchants' Bank of Baltimore.....	12,000 00
" Marine Bank of Baltimore.....	10,000 00
" Franklin Bank of Baltimore.....	7,500 00
" Baltimore and Ohio R. R. Company.....	1,050,000 00
" Baltimore and Frederickton Turnpike Road Co.....	10,000 00
" Baltimore and Yorktown Turnpike Road Co.....	5,000 00
" Union Manufacturing Co.....	10,000 00
Bonds of the Susquehanna and Tide-water Canals.....	1,000,000 00
Loan to the Trustees of Charlotte Hall School.....	2,666 77
Due from sheriffs, clerks, collectors, inspectors, and auctioneers.....	662,813 66
Bonds of the Susquehanna and Tide-water Canal Companies.....	192,500 00

Total productive.....\$3,451,477 11

UNPRODUCTIVE PROPERTY OF MARYLAND.

Bonds of the Chesapeake and Ohio Canal Company.....	\$2,000,000 00
" Baltimore and Susquehanna Railroad Company.....	1,384,046 29
Loan to the President and Directors of the Potomac Company.....	30,000 00
Interest thereon to 18th of May, 1825.....	14,250 00
Stock of the Potomac Company.....	190,444 44
" Baltimore and Ohio Railroad Company.....	3,000,000 00
" Chesapeake and Ohio Canal Company.....	5,000,000 00
" Chesapeake and Delaware Canal Company.....	50,000 00

* The death of John S. Skinner, formerly editor of the "Portman's Magazine," was much lamented throughout the agricultural world. He was recently the editor of a journal called "The Plough, the Loom, and the Anvil." We learn that a monument is about to be erected to his memory.

Stock of the Baltimore and Susquehanna Railroad Company....	100,000 00
“ Annapolis and Elk Ridge Railroad Company	200 375 40
“ Eastern Shore Railroad Co.	66,863 00
“ Nanticoke Bridge Company.	4,383 33
“ Chesapeake Steam-Towing Company.....	25,000 00
Stock of the Elkton Bank of Maryland..	10,000 00
Bonds installed and not installed, exclusive of interest.....	10,759 33
Due from the Chesapeake and Ohio Canal Company, for interest.....	8,274,318 57
Due from the Baltimore and Susquehanna R. R. Co., for interest.....	925,905 76
Penitentiary, for premium, principal and interest.....	50,090 64
Total unproductive.....	\$16,999,623 95
Grand total.....	20,443,071 06

PUBLIC DEBT OF MARYLAND:

Public debt on September 30th, 1849..	\$16,164,813 44
Deduct sterling bonds held by the Baltimore and Ohio Railroad Co..	\$3,200,000 00
Tobacco Loan.....	161,984 15
Interest bonds redeemed.	290,118 38
Sinking Fund.....	1,892,537 61
	<u>\$5,514,640 14</u>

Total public debt to be redeemed.. \$16,650,173 30

The population of Maryland, according to the census of 1850, the returns of which have been lately completed, shows the following results in comparison with that of 184 :

POPULATION OF MARYLAND.*

County.	1850.			TOTAL POPULATION.	
	White Population.	Free. Colored.	Slaves.	1850.	1840.
Allegany.....	21,752	307	724	22,873	15,740
Anne Arundel.....	16,542	4,603	11,244	32,389	20,635
Baltimore City.....	141,441	24,025	2,946	169,012	102,512
Baltimore County.....	34,323	3,600	3,767	41,690	32,067
Carroll.....	14,844	—	470	15,123	17,245
Caroline.....	6,096	2,788	808	9,692	7,868
Calvert.....	3,610	1,530	4,483	9,618	9,095
Cecil.....	15,489	2,619	843	18,951	17,302
Charles.....	5,665	913	9,584	16,162	16,012
Dorchester.....	10,788	3,808	4,283	18,879	18,809
Frederick.....	31,685	3,637	3,361	38,683	34,983
Harford.....	14,414	2,735	2,166	19,315	16,901
Kent.....	5,666	3,132	2,627	11,425	10,840
Montgomery.....	9,435	1,811	5,114	16,360	14,669
Prince George.....	3,702	1,133	11,510	21,345	19,483
Queen Anne.....	7,040	3,174	4,271	14,485	12,625
St. Mary's.....	6,280	1,600	5,811	13,691	13,244
Somerset.....	13,417	3,453	5,568	22,438	19,504
Talbot.....	7,067	2,500	4,134	13,701	12,103
Washington.....	26,969	1,885	2,069	30,923	26,882
Worcester.....	11,824	3,663	3,453	18,940	16,853
Total.....	412,803	73,166	69,178	555,147	467,567

The above table shows an increase in the population of the state during the past ten years, of 107,573. The increase in the whole state during the ten years between 1830 and 1840 was but 20,527, whilst the increase in Baltimore alone was 21,888; so that, in fact, the population of the state, leaving the commercial emporium out of the question, had decreased during that decade, 1,861. Deducting the increase in Baltimore from the whole increase, as shown by the present census, there is left, as the increase for the counties alone, 41,004.

The total free black population of the state, as shown above, is now 73,166; in 1840, it was 61,937—showing an increase of 11,221.

In 1840, the whole number of slaves in the state was 89,719, whilst there are now but 69,178—showing a decrease of 541.

The increase of population in Baltimore City is 66,499,—which is nearly two thirds of

the whole increase of the state. Baltimore County shows the next greatest increase, being 9,522; Allegany next, 7,133; Frederick next, being 3,510; and Somerset next, 2,954. Carroll County, it will be seen, is the only county in the state that shows a decrease in its population, having fallen off 2,122 since the last census. This decrease has doubtless been caused by its neglect to avail itself of a direct railroad connection from the heart of the county with Baltimore City.

According to the last report of the Secretary of the Treasury upon the Banking System of the United States, the banking capital of Maryland was, in

1837.....	\$10,438,655	1845.....	\$3,562,323
1840.....	10,523,494	1847.....	7,969,004
1841.....	10,214,908	1848.....	8,541,886
1843.....	10,700,836	1849.....	8,557,733
1843.....	9,746,379	1850.....	8,704,711
1844.....	9,540,374		

* Baltimore Sun.

BANKS IN MARYLAND, 1851.*

Location	Name of Bank	President	Cashier	Capital
Annapolis	Farmers' Bank of Maryland	George Wells	Thomas Franklin	200,000
Cumberland	Cumberland Bank	David Shriver	Joseph Shriver	112,987
"	Mineral Bank	Thomas J. McKaig	Joseph H. Tucker	160,187
Ellicott's Mills	Patapsco Bank	Thomas R. Dorsey	B. U. Campbell	125,000
Boston	Farmers' Bank, (Branch)	Theo. R. Lockerman	Richard Thomas	871,675
Fredrick	"	Richard Potts	Godfrey Koons	260,000
"	Farmers' and Mechanics'	William Tyler	Thomas W. Morgan	145,430
"	Fredrick County Bank	Alexander B. Hanson	James H. Williams	150,000
Hagerstown	Hagerstown Bank	Alexander Neil	Elie Beatty	250,000
Port Deposit	Cecil Bank	Jonathan Tome	A. Anderson	50,000
Westminster	Bank of Westminster	Isaac Shriver	John Fisher	80,000
"	Farmers' and Mechanics'	Jacob Mathias	Jacob Reese	50,000
Williamsport	Washington County Bank	Daniel Weisel	John Van Lear, Jr.	135,000

Country.....Total, 12 Banks.....Circulation, \$1,200,000..Specie, \$400,000. Capital, \$1,997,070

Baltimore street.	Bank of Baltimore	James H. McCulloh	C. C. Jamison	1,200,000
North street	Chesapeake Bank	John S. Gittings	James Lowndes	311,473
Baltimore street	Citizens' Bank	Adam Denmead	Wm. L. Richardson	100,000
Howard street	Commercial and Farmers'	Thomas Meredith	Trueman Cross	512,500
South street	Farmers' and Merchants'	J. Hanson Thomas	John Loney	393,560
"	Farmers' and Planters'	William E. Mahew	Thomas B. Rutter	600,025
North street	Franklin Bank	John J. Donaldson	Aquila P. Giles	301,850
Gay street	Marine Bank	Jacob Bier	Philip Little, Jr.	310,000
North Calvert st.	Mechanics' Bank	John B. Morris	James W. Alhaut	583,898
Gay street	Merchants' Bank	James Swan	Daniel Sprigg	1,600,000
North Charles st.	Union Bank of Maryland	John M. Gordon	Robert Mickle	916,350
Eutaw street	Western Bank	Chauncey Brooks	James H. Carter	400,000

City.....Total, 12 Banks.....Circulation, \$2,080,000..Specie, \$2,127,000. Cap'l. \$7,140,316

Grand total.....\$9,137,395

According to the late report of the Manufacturers' Convention of Maryland, the number of cotton factories in the state the present year is 28.

FOREIGN TRADE OF MARYLAND.

Years.	Imports.	Years.	Exports.
1840	4,910,746	1840	5,768,788
1841	6,101,312	1841	4,947,166
1842	4,417,978	1842	4,904,766
1843	2,479,131	1843	2,820,814
1844	3,917,750	1844	5,133,169
1845	3,741,804	1845	5,921,977
1846	4,042,915	1846	6,979,055
1848	5,348,643	1848	7,199,789
1849	4,976,000	1849	8,000,660
1850	6,124,201	1850	6,589,481

POPULATION OF BALTIMORE.

Years.	Slaves.	Free Col'd.	White.	Total.
1790	1,255	323	11,825	13,503
1800	2,848	2,771	30,900	36,519
1810	4,072	5,071	36,212	45,355
1820	4,237	10,326	49,856	64,389
1830	4,120	14,790	51,710	70,620
1840	3,212	17,960	81,321	102,513
1850	2,946	24,626	141,441	169,013

In its increase in wealth, Baltimore has kept pace with the increase of its population. In 1808, the value of taxable property in the city was computed at \$2,522,780. The following is the official estimate of the value of the property, and the number of houses erected in the city for the last six years:

Years.	Real and personal prop.	No. houses erected.
1844	58,790,170	609
1845	63,750,496	1,508
1846	64,851,217	2,006
1847	72,079,529	1,930
1848	74,328,976	1,894
1849	78,252,558	80,237,960
1850	80,237,960	

The city now contains upwards of an hundred churches, three universities, four colleges, and many beautiful and commodious public buildings. To notice these, however, further

than they affect the commercial or mercantile character of the city, is no part of the design of this article. The Merchants' Exchange, at the corner of Gay and Lombard streets, is a spacious building, 225 feet long by 141 feet wide, and contains, besides the usual reading-room, and the room for the meeting of the merchants, the custom-house, bank, telegraphic offices, a hotel, &c. The room in which the merchants' meetings are held is fifty-three feet square, has upon its east and west sides colonnades, the columns of which are of fine Italian marble, each a single block, and it is lighted by a dome 115 feet above the street.

The total value of goods shipped from Baltimore during the year ending June 30th, 1849, was \$8,000,600; of which \$7,786,895 were of articles of domestic produce, and \$213,965 of foreign articles. The exports were in 634 vessels, with a tonnage of 149,928 tons and employing 6,335 men in their navigation. Of the above, 491 vessels were American, and 145 under the flags of eighteen different foreign nations.

The foreign imports into Baltimore during the same time were valued at \$4,976,731, of which \$4,613,219 were in American vessels. The foreign imports were received in 484 vessels, of the tonnage of 110,068, and manned by 4,581 men.

The total number of vessels owned and registered at Baltimore on the 30th of June, 1849, was 184,025.35 tons—53,624.75 tons being engaged in coasting, and 11,464.28 tons in steam navigation. In the same year there were built in Baltimore 9 ships and barks, 8 brigs, 41 schooners, 5 steamers, with the aggregate tonnage of 12,199.66 tons. (See Baltimore.)

MAINE.—ITS EARLY HISTORY—PHYSICAL ASPECT—AGRICULTURAL AND MINERAL RESOURCES—COMMERCE—MANUFACTURES—GOVERNMENT—FINANCES—POPULATION—SCHOOLS, COLLEGES, &c.—In the year 1608, a company of Bristol merchants fitted out an expedition of two small vessels, under the command of Martin Pring, for the purpose of exploring the shores of America north of Martha's Vineyard and Massachusetts Bay, and of opening a trade with the natives—some very flattering notices having been received of that portion of the New World from Bartholomew Gosnold, who had visited it the year before. Pring landed on the coast of Maine, in June, 1603, discovered some of its principal rivers, and returned to England. In 1606 he repeated the voyage, and made a more accurate survey of Maine than before. The whole country, from the mouth of the Hudson to New-Brunswick, was in the same year granted by James I., of England, to a body of "knights, gentlemen, and merchants," in England, called the Plymouth Company. This company sent out a colony of planters, under George Popham, who landed at the mouth of the Kennebec river on the 21st of August, 1607, and erected a few rude cabins, a store-house, and some slight fortifications. Forty-five only of the emigrants remained at the place, which they called St. George; the rest returned to England in the following December. The place where this colony, usually called the Sagadahoc colony, passed the winter, is now the town of Phippsburg. The winter was extremely severe, and the poor emigrants suffered from famine and hardships of every description. Their store-house was destroyed by fire, their commander died, and in the following year they abandoned the settlement, and returned to England.

The principal object of trading vessels to the American coasts, at that early period, was the collection of furs and skins, and of *sassafras*, then becoming fashionable in England, as a medicinal drug. Pring took home with him one of his vessels entirely freighted with *sassafras*, and the other with furs and skins.

The next settlers on the New-England coast were the Pilgrims, at Plymouth, in 1620, from whom settlers gradually extended to the coasts of Maine. Gorges and Mason, two Englishmen, had long been engaged in trafficking on these coasts. In 1621 Mason obtained the grant of a tract of country, extending from Salem to the mouth of the Merrimac; and in 1622 Mason and Gorges, together, obtained a grant of the whole tract from the Merrimac to the Kennebec, which they called *Laconia*. They sent out a colony of fishermen, who settled at the mouth of the Piscataqua, where Portsmouth now stands. Others, fishmongers from London, settled at Dover, eight miles up the river. These settlements, in what is now New-Hampshire, are

among the oldest in the United States; but they did not prosper, and were only fishing stations. Settlements of stragglers continued to be made eastward along the coast. In 1625 there was a settlement at what is now York, and another at the mouth of the Saco. In 1632 the people of Plymouth established a trading-house on the Penobscot, and one at Machias, at the entrance of the Bay of Fundy, both of which places were plundered by the French in 1633, who claimed the whole country east of Pemaquid Point. In 1635 the French sent an armed vessel to the trading house at Penobscot, and took possession of it, paying the traders for their goods in bills on France. The traders were sent home to Plymouth. An attempt was made to regain the place, but without success; and the French held it many years.

In 1635, the Council of New-England surrendered their patent, and their territories fell to eight different proprietors. Gorges was one of them; and to his territories, lying between the Kennebec and Piscataqua, he gave the name of *New-Somerset*. He sent out his nephew, William Gorges, as his deputy, to establish a government over the settlements. A general court was held at Saco. In 1639, Gorges, who for thirty years had been engaged in colonization projects, and who had lost by them some \$98,000, obtained a royal charter for his American provinces, and changed their name to Maine, in honor, it is conjectured, of the Queen of England, who had some feudal relation with the French province of that name. It had, however, been long the custom of the planters and fishermen of the whole New-England coast, to designate it as "the Main," to distinguish the main land from the islands.

Gorges, who appears to have had somewhat pompous and inflated notions of things, attempted to erect over his fishmonger subjects a stately government, consisting of a lieutenant, chancellor, marshal, admiral, (though he had no navy,) and other high officers, who, together with eight deputies chosen by the people, were to constitute the general court, or legislative council. The little hamlet of Agamenticus he chartered as a city, and changed its name to *Georgiana*, in honor of himself.

When the civil war commenced in England, Sir Fernando Gorges adhered to the king, and his enemies succeeded in getting wrested from him all his territory north and east of the Saco. Gorges died in 1647, and in 1652 his little province was annexed to Massachusetts, and *Georgiana* changed to York.

The heirs of Gorges contended with Massachusetts for Maine until the year 1677, when they sold all their right and title to it for the sum of £1,200. The province, as claimed by Massachusetts, under this purchase, did not extend east of the Kennebec. The French

claimed all east of that as part of Acadie; and New-York, then governed by Andros, claimed all between the Kennebec and Penobscot. Andros built a fort at Pemaquid, and purchased peace of the Indians, who had nearly depopulated the white settlements, by agreeing to pay them an annual tribute of corn—a peck for each English family.

From 1670 to 1712, the English settlements in Maine suffered much from the incursions of the Indians and French. Some of the towns were completely destroyed, and large numbers of people massacred. The government of Massachusetts offered a reward of \$125 for every grown Indian taken prisoner. By the treaty of Utrecht, in 1712, France yielded to England all her claims to Acadie, and thus the Indian massacres in New-England ceased. Of all the flourishing settlements on the coast of Maine, however, only three were left, the others having been destroyed.

Maine being incorporated with Massachusetts, its history is merged in that of the latter, and we hear nothing more of it until after the Revolutionary War. In 1785 its population was so increased that a convention of the people was held at Portland, to consider the expediency of erecting themselves into an independent state.

Portland was first settled in 1632, and purchased by Gorges in 1637. In 1678 it was destroyed in the Indian war, and again in 1690 by the same enemy. It was rebuilt in 1715, and in twenty years afterwards its trade in lumber was extensive, so that it supplied the British navy with masts and spars, which were chiefly exported in foreign vessels. At the commencement of the Revolution, Portland had a population of 1,900, and a port tonnage of 2,555. It had 230 houses, and a Congregational and Episcopal church. In 1775 it was bombarded by the British, and 136 houses, including the principal public buildings, were destroyed. The place was at that time called Falmouth, which was changed to Portland in 1786. It is now the largest town in Maine.

It was not until 1802 that another effort was made by the people of Maine to become a separate state. In 1788 the people opposed the ratification of the federal constitution, chiefly on the ground that it might prove an obstacle to their favorite project of becoming an independent state, which was not effected until 1820.

The boundaries of Maine, as fixed by the late treaty, are the result of a controversy with Great Britain of a quarter of a century's standing, and one which came near involving the two countries in a war. By the treaty, the St. Croix, and a line running due north from the monument at its source to the St. John's river, form the boundary on the east. On the north, the line follows the St. John's and St. Francis rivers to lake Pohenagamook.

On the west, the line follows the high lands from that lake in a south-west direction to the north-east corner of New-Hampshire, which state forms part of the western boundary. The Atlantic is on the south.

Maine is the largest of the New-England States, having an area of 30,000 square miles, or more than four times the area of Massachusetts. Maine is diversified, of an uneven surface, but not generally mountainous. Near the sea the land is mostly level. Farther inland, it becomes hilly, and finally mountainous. Mount Katahdin, the highest elevation, is 5,300 feet high. In the interior there are a number of small lakes, noted for their scenery. Maine has a sea-coast of over 280 miles, indented by numerous bays, and protected by numerous islands. It has more good harbors than any other state in the Union. The land on the sea-coast, for from ten to twenty miles inland, is not very fertile, but improves in quality as one leaves the coast. In the north-west and south-east parts, the soil is light and indifferent. Between the Penobscot and Kennebec there are lands equal in fertility to any in the Union.

The climate of Maine is subject to great extremes of heat and cold, ranging from 100° of Fahrenheit's thermometer, in summer, down to 27° below zero in winter. It is, however, generally healthy. The season of vegetation does not continue in vigor more than three and a half months in the year, its greatest length being from the 21st of April to the 16th of October.

Maine has a number of fine rivers. The Penobscot, 250 miles long, is navigable for large ships to Bangor, 52 miles from the ocean. The Kennebec, 250 miles long, is navigable for large ships 12 miles, to Bath, and for vessels of 100 tons, 42 miles, to Augusta. The Saco is navigable only six miles. The entrance and exit from the rivers of Maine are very much facilitated by the high tides which prevail there. At Bangor, 52 miles from the sea, the tide rises seventeen or eighteen feet.

It is computed, that at least one tenth of the surface of Maine is covered with water, so numerous are the lakes and ponds in the interior. Lake Moosehead, the largest, is 50 miles long, and 10 or 12 broad. Penobscot Bay is 30 miles long and 18 wide. Casco is 20 miles long.

Maine is noted for its fisheries, lumber, and ship-building. Its other products are grass, flax, and all the different kinds of grain; but the season is often too short for Indian corn. The wild lands produce vast quantities of timber and lumber, which may be regarded as the staple production, the annual amount exported being from 10 to \$15,000,000. The state is well adapted to grazing and wool growing, the amount of wool being several millions of dollars annually. Lime, marble,

and ice are exported in vast quantities. Ships are manufactured for a foreign market, and the fisheries furnish employment for thousands of the citizens.

The most commercial places in the state are Portland, Bangor, Bath, Hallowell, Augusta, Thomaston, famous for its lime, Belfast, Wiscasset, Wells, Gardiner, Brunswick, Camden, Castine, Eastport, and Topsham, noted for its ship-building.

Government.—The government of Maine consists of a Governor, Senate, and House of Representatives. The governor is elected annually by the people, and has a salary of \$1,500. A council of seven persons to advise the governor, is elected annually by the joint ballot of the legislature. The members of the Senate and House of Representatives—the former consisting of thirty-one, and the latter of one hundred and fifty-one members—are elected by the people, annually. All male citizens of the United States, 21 years of age, (except paupers), who have been in the state three months previous to an election, are voters, by written ballot.

Judiciary.—This is vested in a supreme judicial court, and such other courts as the legislature may, from time to time, establish. The Supreme Court has four judges, with a salary of \$1,800. The state is divided into three districts, with a judge over each—salary, \$1,200. In each of the 18 counties there is a Probate Court, with salaries varying from \$150 to \$620.

Finance.—Maine has a total debt of \$600,500, paying an interest of \$36,000. From the last report of the state treasurer, we have the following:

Amount of receipts from May 1,	
1851, to April 30, 1851.....	\$430,196 30
Balance of cash in treasury May 1,	
1850	125,924 07

\$556,120 37

Amount of expenditures from May 1,	
1850, to April 30, 1851, inclusive ..	\$67,450 30

Leaving a balance in treasury May 1,	
1851, of	\$44,670 07

Some of the heaviest items of expenditure in 1850-51 were as follows: Pay of the legislature, \$47,976; salaries, \$24,557; roll of accounts, \$15,238; cost of criminal prosecutions, \$26,887; school fund, \$31,610; state roads and bridges, \$6,750; deaf, dumb, and blind, \$6,126; state reform school, \$3,000; insane hospital, \$602; teachers' institutes, \$2,600.

The resources of the state, consisting principally of direct taxes and income from the land-office, are estimated at \$688,692, for 1851. During the same year the chief resources of income were as follows: Direct taxes, \$207,575; land-office, \$137,841; permanent school fund, \$2,707; school fund, No.

18, \$28,440; duties on commissions, \$1,850; bank dividends, \$800; U. S. stock and premium, \$21,850; interest on U. S. loan, \$600.

Population.—The progress of the population of Maine, since 1790, has been as follows:

		Increase per cent.
1790	96,540 .....	.....
1800	151,719	57.3
1810	228,705	50.7
1820	298,385	30.4
1830	399,955	34.0
1840	501,793	24.9
1850	588,088*.....	16.6

The present population consists of 108,787 families, containing 296,685 white males, and 285,128 white females. The free colored population is 1,325. The number of dwelling-houses in the state is 95,797. Its number of representatives in Congress is six, having lost one by the apportionment of the last census. As each representative must represent 93,702 persons, Maine has a residuary fraction of 21,020 persons.

The two most populous cities in Maine are Portland and Bangor, the population of the former being 26,819, and of the latter, 14,441.

Common Schools.—In 1828, the state set apart 20 townships of public land as a basis for a school fund. These lands have yielded thus far \$104,368, which is permanent school fund. In 1850, there were set apart 24 half townships more. The banks are also required to give to the school fund, semi-annually, one half of one per cent. on their capital stock. This tax, in 1850, amounted to \$27,230; which, added to the interest arising from the school fund, amounting to \$6,216, makes \$33,492, the sum divided among the towns of the state, in 1850, for school purposes. The inhabitants of every town are also taxed 40 cents each for the support of schools. In 1850, this tax amounted to \$264,351.

The number of common schools in the state, in 1850, was 6,627, with 230,274 pupils. The average monthly wages of male teachers is \$16.66; of female \$5.92. There are school libraries in nine towns. There are 92 chartered academies in the state. Teachers' institutes also have been in successful operation for several years; 1,732 teachers attended them in 1850.

Colleges.—Bowdoin College, at Brunswick, named in honor of its principal benefactor, the Hon. James Bowdoin, was founded in 1794. Its president is Leonard Woods, jr., D.D. It has 14 professors, 1,051 alumni, and 121 students, at the present time. Its library contains 22,900 volumes. Waterville College was founded in 1820, by the Baptists, at Waterville. David N. Sheldon, D.D., is its president. It has five professors and 76 stu-

* This gives 19 inhabitants to the square mile.

dents. There is also the Bangor Theological Seminary, at Bangor, founded in 1816; the Wesleyan Seminary, at Readfield, founded in 1822. Maine has also the Maine Medical School, at Brunswick, founded in 1820; it has five professors and 51 students.

There were in Maine, in 1840, 3,241 persons, over 20 years of age, who could neither read nor write.

Internal Improvements.—The Cumberland and Oxford Canal, connecting Portland with Sabago pond, and, by locks in the Songo river, with Brandy and Long ponds, forms a navigation of 50½ miles. It is 84 feet wide, contains 26 locks, and cost \$250,000.

Railroads.—The Androscoggin and Kennebec Railroad is 55 miles long, and cost \$1,621,878. The Bangor and Piscataquis is 11½ miles long. The Calais and Baring, 6 miles long. The Portland, Saco, and Portsmouth is 52 miles long. The great Atlantic and St. Lawrence Railroad, extending from Portland to the Canada line, which it strikes at the town of Canada, in Vermont, where it connects with the St. Lawrence and Atlantic Railroad, extending from Montreal eastward, is 156 miles long. Railroad cars now run through from Montreal to Portland. It has a branch 13 miles long.

The Kennebec, Bath, and Portland Railroad connects Portland with Augusta, the capital of the state. It is 60 miles long. There is also the York and Cumberland, from Portland to Great Falls, New-Hampshire, which is about 50 miles long.

On the 1st of January, 1852, Maine had 315 miles of railroad complete and in use, and 137 miles in progress of completion; making in all, 442 miles.

Manufactures.—From the returns of the last census, we have the following statistics on the manufacture of cotton, woollen, and iron, in the state of Maine, up to 1850:

	Capital invested.	Hands employed.	Value of products.
Cotton goods,	\$3,339,700..	3,739..	\$2,596,356
Woollen goods,....	467,600..	624..	753,300
Pig Iron,.....	214,000..	71..	36,618
Iron Castings,....	150,100..	244..	265,000

The number of spindles employed in the manufacture of cotton, in 1850, was 142,700; but during that year 112,500 were stopped.

The quantity of lumber of all kinds manufactured in Maine, in 1850, was 208,754,201 feet; in 1851 it was 202,005,880 feet, which, at the average price of \$10 per thousand feet, would amount to \$2,020,058.

Maine is noted for its ship-building. In 1850 it built 127 ships, 75 brigs, 115 schooners, 3 sloops, and 6 steamers;—in all, 326 vessels, having a tonnage of 91,211. No other state in the Union built half as many, except New-York, which built 324 vessels, of a tonnage of 58,342.

Salt is manufactured in large quantities in

Maine; also, paper, leather, hats, caps, bonnets, articles of saddlery, pottery ware, bricks, lime, machinery, hardware, cutlery, cordage, carriages and wagons, furniture, &c. The amount of capital employed in manufactures is not probably less than \$10,500,000.

Commerce.—Maine exported, in the year ending July 1, 1850, domestic products to the amount of \$1,536,818, and foreign to the amount of \$29,094. Her total imports, for the same year, amounted to \$856,411.

Banks.—Maine has thirty-seven banks, with a capital of \$3,586,100 for all of them. Their entire circulation is \$2,994,906. Their total liabilities amount to \$8,251,260. These are met by the following resources:

Loans.....	\$6,450,460
Bank balances.....	813,232
Specie on hand.....	630,296
Real estate.....	102,570
Bills of Maine banks.....	150,016
Bills of other banks.....	104,686

Total resources.....\$8,251,260

Such is the condition of banking in Maine, as furnished by the last annual abstract, published by the Secretary of State in May, 1851. The average dividends of these banks is about four per cent.

More complete statistics of Maine cannot be given, until the returns of the last United States census are known.

MISSOURI.—ITS HISTORY.—STATE GOVERNMENT, COURTS, ETC.—BOUNDARIES, AND SURFACE AND SOIL OF THE COUNTRY.—NATURAL PRODUCTIONS AND CLIMATE.—PRINCIPAL RIVERS.—CHIEF TOWNS.—MINERAL RESOURCES OF THE STATE.—INTERNAL IMPROVEMENTS.—POPULATION.—EDUCATION, ETC.

HISTORY.—Hernando de Soto may be said to be the first European that beheld the river Mississippi, called by him, on its discovery, (April, 1541,) "Rio Grande." Crossing this stream, probably some thirty miles below Helena, in the state of Arkansas, he traversed, at the head of his adventurous band, a goodly portion of the territory beyond. He is thought by some, but without sufficient reason, to have come, during this march, into the limits of the present state of Missouri. The Mississippi was first explored in 1673, by Marquette and Joliet, two French missionaries, and more fully by La Salle, also a native of France, in 1682. By him all the region situate between the so-called "Illinois country" and the Gulf of Mexico was formally declared an appendage of the French crown, and called Louisiana, in honor of the reigning monarch. From this time, settlements began to be made by the French within the Mississippi valley, advancing respectively from the northern and southern extremities towards

the interior. Canada had long (from 1606) been inhabited by colonists from France; but not till the beginning of the 18th century was the region bordering on the gulf alike distinguished. Natchez was settled in 1700; New-Orleans was founded in 1718; and within a few years the whole valley was protected from Spanish invasion by a chain of forts extending from the lakes to the Mexican gulf. Among these, was built in 1719, Fort Orleans, near the mouth of the Osage, not far from the present capital of Missouri. The "Illinois country," above mentioned, was discovered and explored by Joliet and Marquette, and was colonized before Louisiana. The first settlement was made at Kaskaskia, in 1684; the next, at Cahokia, in 1699; and Vincennes, in 1735.

In legal proceedings, the region now known as the state of Missouri was included by the French and Spanish in the Illinois country; but popularly and historically it was denominated "Upper Louisiana." The state of Arkansas was included within the same division. Situated in the central part of the valley, the progress of settlement in Missouri at first was not rapid. Its lead mines were worked as early as 1720. In 1755, the oldest town in the state, St. Genevieve, was founded; St. Louis, in 1764; and afterwards a number of towns in quick succession. During all this time, there was granted only one tract of land within the limits of the state. Meanwhile (1763) the jurisdiction of the valley passed from France to Spain and England: Spain obtaining all the territory west of the Mississippi; England all east of that river. To England, too, was assigned, as the reward of conquest, made permanent by the treaty of 1763, the entire province of Canada. France, after a violent contest, had been despoiled of all her territorial possessions in North America. During the struggle, a number of Canadian French, expecting but dreading the English yoke, emigrated by the way of the lakes, and going southward, located in Illinois, and Upper and Lower Louisiana. Hence the first important impulse to the colonization of Missouri. The population of Spanish Louisiana at the time of its public transfer, not without serious opposition on the part of the settlers, (1769,) was estimated at 13,540 persons, of whom 5,556 were whites, the remainder negro slaves. Of the whites, over 2,000 were able to bear arms. Of the whole population, the city of New-Orleans alone contained 3,190 souls, domiciliated in 468 houses. A river trade had sprung up between the northern and southern portions of the province; and the exports of the province amounted, the year before, to \$250,000.

The character of the new government was mild and conciliating. The laws of Spain were promulgated as the law of the land. The highest tribunal in Lower Louisiana was that

of the governor; in Upper Louisiana, that of the lieutenant-governor. The commandants of the various posts in the province were the inferior tribunals. Lands were granted liberally to colonists, on the payment of a trifling *douceur* to the proper commandant; and every encouragement was given to those wishing to effect a settlement. Numerous emigrants from Spain flocked into the province. In 1775, St. Louis, originally a depot for the fur trade, had increased in population to 800. Its houses numbered 120, many of them built of stone. St. Genevieve contained 460 inhabitants, and about 100 houses. Just then the American revolution broke out, and Spain, siding with the English colonists, entered into hostilities against England. In Lower Louisiana and in West Florida, the arms of Spain were successful. Meantime St. Louis was besieged and attacked (1780) by a body of British troops and Indians, 1,540 strong, from Michilimackinac and the southern extremity of Lake Michigan. Col. Clark, then at Kaskaskia, being called on for assistance, arrived in time to give succor, when the grand assault was being made upon the town, (May 6;) for, attacked by the "Longknives," as the Indians called the Americans, they fled from the scene, and returned in chagrin to their homes. During the siege, which lasted a week, about sixty persons were killed in the town and vicinity. Thirty more, who had been captured by the Indians, were rescued by the gallant Clark. The force under his command was not quite 500 men. The general peace of 1783 put an end to hostilities. Spain retained her previous possessions, and received in addition the whole of Florida south of the 31st parallel of latitude. Great Britain resigned East Louisiana, called also Illinois, to the United States, retaining only Canada.

Emigration into Spanish Louisiana began once more on the restoration of peace, and trade and agriculture commenced again to flourish. The hardy settlers of the western part of the United States now built their cabins in numerous places on the west side of the Mississippi. As might have been expected, difficulties soon arose between Spain and the United States. The former power became jealous of the increasing greatness of the latter. A dispute relative to the western boundary of Georgia and the navigation of the Mississippi was settled by a treaty, (Oct. 20, 1795,) by which the Spanish king granted to the United States the free navigation of the Mississippi, and agreed to the 31st parallel of latitude as the northern boundary of the Florida. Territory north of that line, occupied by Spain at the signing of the treaty, was not surrendered, however, until 1798, (March 28,) the rival powers having approached meanwhile the very brink of war. The promised free navigation of the Mississippi was unexpectedly obstructed, a place of

commercial deposit refused, and disabilities thrown in the way of Americans desiring to settle in Louisiana. War would certainly have ensued, for Spain was jealous of American prosperity; and the American spirit of enterprise, resolved on passing any and every territorial bound, was not always intent on preserving the strictest regard to the rights, real or assumed, of its less adventurous neighbors. Invasion, however, was prevented by the cession of Louisiana to France, (March 21, 1801,) and its disposal by that power to the United States, (April 30, 1803.)

In the European troubles consequent upon the French revolution of 1789, Spain had become involved in the general war, and her king was compelled to bow before the irresistible might of Napoleon, then First Consul of France, and surrender to that conqueror the province of Louisiana. Distrusting his power to retain it, engaged as he was in a contest with Europe, and pressed for money, Napoleon sold the province to the United States for \$15,000,000. It was formally delivered to the United States Dec. 20, 1803, at New-Orleans; the outposts not being all resigned until the ensuing spring. At this time the province contained 49,500 inhabitants, of whom 6,028 were living in Upper Louisiana. The products of its agriculture, in 1802, were chiefly cotton and sugar; of the former, 20,000 bales, of the latter, 5,000 hogshheads. The commerce of New-Orleans had become extensive; its exports, coming from the provinces and the Western states and territories, and consisting chiefly of flour, pork, salt, beef, tobacco, cotton, sugar, molasses, peltries, naval stores and lumber, amounted to 40,000 tons. The commerce of Upper Louisiana was flourishing. A prosperous trade was being carried on between St. Louis and New-Orleans, and with the settlements on the Ohio, Cumberland and Tennessee rivers. The annual crop was about 88,000 minots (264,000 bushels) of wheat, 84,000 of Indian corn, and 28,827 lbs. of tobacco. The mines produced 1,700 quintals (cwts.) of lead; the salines, about 1,000 bbls. of salt. The fur trade brought in about \$70,000. Louisiana, henceforth, formed part of the United States, itself "an empire," bought, to use the words of Bonaparte, "for a mere trifle."

The whole purchase was speedily divided into the "Territory of Orleans" (since 1812 the State of Louisiana) and the "District of Louisiana," erected in 1805 into a territorial government, administered by a governor and territorial judges, under the title of "Territory of Louisiana." The seat of the government was St. Louis: its districts, St. Charles, St. Louis, St. Genevieve, Cape Girardeau, New-Madrid, and Arkansas. In 1812, the name was changed to "Missouri Territory." The province extended from latitude 33° to 41° north, and the territorial government became representative.

William Clarke was the first governor. The assembly consisted of a Legislative Council of Nine, appointed by the President, and a House of Representatives, one member for every 500 free white males, elected by the people. The limits of Missouri Territory on the west, not far off where the cession was made by France, were gradually extended by treaties with the Indians, as the influx of immigrants required. People from the Western States began to move in from the time of the purchase. In 1810 the population numbered 21,000, of whom all but 1,500, belonging to Arkansas, were settled within the present limits of Missouri. Upon the organization of the regular territorial government, numerous American pioneers flocked in from Kentucky, Tennessee, Ohio, etc., especially at the close of the war with England, (1815;) overrunning, so to speak, the French settlements. American habits, usages, laws and institutions soon became prevalent. The old French settlers were quickly merged and almost lost among the later and more active population. Chiefly in the cities, where even now the Catholic religion is full of life and vigor, did they continue to exert for a time a leading influence; their habits, even in these, however, becoming more and more assimilated to those of the Anglo-Americans, until at length the whole became a homogeneous people.

Immigration was so rapid, that in 1817 the territory contained 60,000 souls. St. Louis counted at that time 5,000 inhabitants, against 1,000 in 1804. It had already become the emporium of the upper Mississippi. In 1817, application was made by the Assembly to Congress for authority to frame a state constitution preliminary to admission into the Federal Union. A fierce and stormy debate arose at once on the subject in Congress. A powerful party demanded that the new states should exclude slavery by their constitutions. The discussion raged for two years, threatening to tear the Union asunder. At length, however, the debate was stopped by the passage of the compromise resolutions of Mr. Clay, by which it was agreed that the institution of slavery should be recognized in Missouri, but in no other new state north of latitude 36° 30'. The state constitution, slightly modified since its adoption, was framed by a convention of forty delegates, which met at St. Louis June 12, 1820, and adopted on the 19th of July following. The new state was found, by a census taken the same year, to contain a population of 66,586, of whom 10,222 were slaves.

From this time until the present, there has flowed a constant tide of immigration into Missouri from the Southern, Western, and Northern States, and from Europe. Before the close of 1833, there had come to the state as many as 30,000 frugal and industrious emigrants from Germany alone. Agriculture, commerce, manufactures, etc., have kept pace

with the population. In 1836, the 65 counties of the state contained in all, 244,208 inhabitants.

STATE GOVERNMENT.—According to the constitution, the governor is chosen by the people, for the term of four years. He must be 35 years old, a native of the United States, and a resident of the state for four years. He nominates the judicial and some other civil officers, pardons and reprieves; but his veto upon a legislative act is set aside by a majority of each house in the general assembly. The Lieutenant-governor, chosen as the governor, is also president of the Senate. The general assembly, or legislature, is composed of two branches, the Senate and the House of Representatives. Senators (not fewer than 14 nor more than 33) must be 30 years old, citizens of the state for four years, tax payers, and are chosen for a term of four years. Representatives, (not above 100,) chosen every two years, must be 24 years old, inhabitants of the state two years, and of the county one, and must have paid a tax. Judges are appointed by the Senate on the nomination of the governor, and hold office during good behavior, or until 65 years of age. Soon, no doubt, they will be appointed by popular election. Every free white male citizen of the United States, 21 years old, a resident in the state for one year, and at the place of voting three months, is a qualified elector. The Supreme Court is composed of three judges,

and has only appellate jurisdiction. The circuit courts, held twice a year in each county have exclusive criminal jurisdiction, hearing all cases, unless otherwise directed by law, not cognizable by a justice of the peace. County courts have jurisdiction over matters probate, and local county affairs. Appeal is made to the circuit courts. Amendments to the constitution can be made by a vote of two thirds of the general assembly. Only one bank, with not more than five branches, and a capital of not more \$5,000,000, one half reserved to the state, can be established. Slaves have the same protection of life as whites, and in criminal cases are tried by a jury, and provided with counsel by the court. A revision and digest of the laws is to be made every ten years. The general assembly meets biennially, on the last Monday in December, in Jefferson City.

The following is a list of the Governors of Missouri from its territorial organization, in 1804, to the present time:—Territorial—Amos Stoddard, (1804–5;) James Wilkinson, (1805–7;) Meriwether Lewis, (1807–18;) William Clarke, (1818–20.) State—Alexander McNair, (1820–24;) Frederick Bates, (elected in 1824;) John Miller, (1828;) Daniel Dunklin, (1832;) Lilburn Boggs, (1836;) Thomas Reynolds, (1840;) John C. Edwards, (1844;) Austin A. King, (1848.)

The officers of the state government for the year 1851, are these:

	Term ends,	Salary.
Austin A. King, Richmond,	1852.	\$2,000 (and a furnished house.)
Thomas L. Price, Jefferson City,	1852.	\$450 [a-day while presiding.]
Ephraim B. Ewing, Richmond,		
Wilson Brown, Cape Girardeau,	1853.	\$1,800
Peter G. Glover,	1853.	1,600
William A. Roberts, Boone County,	1853.	750
A. P. Richardson, Bay County,	1853.	1,250
Gustavus A. Parsons, Jefferson City,		100
George W. Miller,		100
Merryweather L. Clark, St. Louis,		1,500
James M. Hughes, Liberty,		
Henry Shurlds, St. Louis,		2,000

The Supreme Court is composed of William B. Napton, Saline county, Presiding Judge, (with a salary of \$1,100;) John F. Ryland, Lafayette county, Associate Judge, (\$1,100;)

James H. Birch, Clinton county, Assistant Judge, (\$1,100.)

Of the fourteen circuit courts, the following are the officers and their salaries:

Judges.		Salary.	Attorneys.	Salary.
James W. Morrow,	1st Circuit,	\$1,000	William A. Roberts,	\$750 and fees.
W. A. Hall,	2d " "	"	Charles H. Hardin,	250 " "
Carty Wells,	3d " "	"	A. W. Lamb,	" "
Addison Rees,	4th " "	"	J. J. Lindley,	" "
H. Young,	5th " "	"	S. L. Sawyer,	" "
George W. Duane,	6th " "	"	M. Oliver,	" "
F. P. Wright,	7th " "	"	W. P. Johnson,	" "
Alexander Hamilton,	8th " "	"	James R. Lackland,	" "
John H. Stone,	9th " "	"	M. D. Stevenson,	" "
H. Hough,	10th " "	"	Samuel A. Hill,	" "
James A. Clark,	11th " "	"	W. Halliburton,	" "
Sol. L. Leonard,	12th " "	"	Samuel Archer,	" "
O. S. Yancy,	13th " "	"	John T. Coffee,	" "
Daniel M. Leet,	14th " "	"	John B. Woodside,	" "

Besides the circuit and county courts, the city of St. Louis has a Court of Common Pleas, with jurisdiction very like that of the circuit court; a Criminal Court, a District Court of Probate, and a Recorder's Court. Samuel Treat is Judge of the Common Pleas, (\$1,000;) James B. Colt, of the Criminal Court, (\$1,000;) P. G. Ferguson, of Probate, (fees;) Mr. Dougherty, Recorder, (\$1,200.)

The amount of the state debt is \$684,997 40; the interest on it, \$73,100. The branches of the State Bank (itself being in St. Louis) are located respectively in Fayette, Palmyra, Jackson, Springfield, and Lexington. Of the stock paid in to the bank and its branches, up to December 21, 1850, \$954,205 were owned by the state; \$254,926 by individuals; deposits, \$1,096,284; received in interest and exchange, \$273,829; circulation, \$2,552,500; bills discounted, \$1,947,075; specie on hand, \$1,198,268.

BOUNDARIES, AND SURFACE AND SOIL OF THE COUNTRY.—The state of Missouri lies, in general, between the parallels of 36° 30' and 40° 30' north latitude, and 12° and 17° 30' longitude west from Washington. More specifically, its eastern boundary is the Mississippi, beginning at latitude 36°, and running north to the mouth of the Des Moines, whence the line follows the latter river up to its rapids, (40° 30'.) The northern boundary is the parallel of these rapids to the point where it cuts the Missouri. The western boundary follows the Missouri to the mouth of the Kansas, where it commences running due south, and so continues until it intersects the parallel of latitude 36° 30'. The southern boundary line is the parallel of 36° 30' as far as the St. Francis, whence it follows the course of that river to its mouth, and after that the parallel of latitude 36° to its point of intersection with the Mississippi. The state contains, within these boundaries, 67,380 square miles, or 43,123,200 acres.

In the southeastern part of the state the country, which was once capable of cultivation, became, after the earthquakes of 1811-12, marshy. This district contains, on estimate, 1,517,287 acres, and extends south from the neighborhood of Cape Girardeau into the northern part of Arkansas, a distance in Missouri alone of 108 miles, and westwardly as far as the river St. Francis. The land is well located as regards facilities of transport, and is said to be as fertile as any in the valley. The greater portion can be, and at some not very distant period will be, reclaimed by artificial means, and brought under cultivation. The probable cost of reclamation is estimated at \$1,000,000. The remaining parts of the state, though they include much bottom land, are not swampy. The river Missouri separates the whole into two parts, distinguished from each other by dissimilar geological and geographical features. South of that river,

the surface of the country is rolling as far west as the Osage, gradually rising into a hilly and mountainous district, forming the outskirts of the Ozark Mountains. Beyond the Osage, at some distance, commences a vast expanse of prairie land, which stretches away to the Rocky Mountains. The chief geological deposits of the region are solid strata of carboniferous and alurian limestone and sandstone, reposing on or around the unstratified primitive rocks. In the hilly and broken mineral region, which includes the greater part of the state south of the Missouri, having an area of about 17,000,000 acres, the soil, which of course lies above the geological deposits just mentioned, is formed of decomposed sandstone, syenite, and magnesian limestone. Soils constituted of the last two elements are fertile; but in many of the districts of the mineral region, their productiveness is impaired by the admixture of oxide of iron. Other districts, as the Bellevue Valley, and the valley of the Maramec, Gasconade, and Osage, are well fitted for cultivation, or for pasture. Around the head waters of the White, Eleven Points, Current, and Big Black, where the land is most mountainous, the soil is formed of decomposed semivitreous sandstone, and is in general unproductive, though it supports a magnificent growth of yellow pine, valuable for its lumber. The intervening valleys, however, are decidedly fertile, but small in extent. The lands situate more immediately south of the Missouri are partly sandy and partly calcareous. In general, where alumina or clay sufficiently abounds, we have here a fertile soil, adapted to the production of wheat, oats, barley, maize, hemp, tobacco, and the grasses.

That part of the state which lies north of the Missouri river is in no place mountainous, but either rolling or quite flat. It contains more inhabitants than the southern division; and being richer, is in a more advanced state of cultivation. Its geological substratum is chiefly carboniferous limestone. The coal measure of Illinois extends west of the Mississippi at St. Louis, and is probably commensurate with the northern division of the state, being limited on the south by the narrow strip of land above spoken of, lying south of the Missouri. The soils of this region are chiefly calcareous and arenaceous, the aluminous being limited in extent. The calcareous, or those abounding in lime, which are predominant, are fertile, particularly near the margins of the rivers. Of this character are the lands in the western part of the state, along the Missouri. The counties of Clay, Platt, and Buchanan cannot be readily surpassed in productiveness. The other western and interior counties are nearly equal in fertility to those specified. In the eastern part of the region, arenaceous or sandy soil predominates. These lands, which are compar-

actively barren, are found on the southern flank of the prairies which have their origin in north Missouri, and extend to the head waters of the Mississippi. In general, it may be said that the land of Missouri is productive. The mineral region of the south, unlike most others, is, on the whole, a fine agricultural district; but the want of a convenient market is a drawback to its agricultural advancement.

NATURAL PRODUCTIONS AND CLIMATE.—Except on the prairies, Missouri is well timbered. The river bottoms, in particular, are covered with a luxuriant growth of oak, elm, ash, hickory, cotton-wood, and black and white walnut. In the more barren districts are found white and pin-oak, and sometimes forests of yellow pine. Many of the trees and shrubs met with differ from those found in the same latitude in Ohio. The crab-apple, paw-paw, and persimmon, are abundant; as also the hazel and pecan. Three species of wild grape vine are common throughout the country. The prairies are covered, in the proper season, with numerous varieties of flowers, and with a coarse, tall grass, which, either green or cured, is excellent fodder for cattle. Of the cultivated natural productions, wheat and Indian corn succeed the best. Rye, barley, oats, and the other productions of the middle and northern states, as buckwheat, hops, hay, &c., are successfully cultivated. Hemp has, of late years, been raised with considerable success; but, owing chiefly to haste and carelessness in its preparation, it has lost ground in the market, and does not command near so fair a price as that not naturally better, imported from abroad. Flax is also produced. Cotton can be raised in the south-eastern limits of the state. Tobacco is being raised in abundance, and will become, probably, one of the leading staples of Missouri. Apples, peaches, pears, apricots, nectarine and other fruit trees produce in profusion. Potatoes of both kinds succeed well; and so does the vine, which is successfully cultivated on the southern slopes of hills and eminences. The dryness of soil and atmosphere, characteristic of the state, is favorable to its development.

The wild animals of the region are those common to this part of the valley. The most formidable disappear with the advance of civilization. Wild fowls are abundant. The facilities for raising cattle, horses, and sheep, are superior to those of any other western state, Illinois excepted. Hogs are reared with more ease than in Ohio, and are beginning to be extensively raised for export. Poultry succeeds admirably.

The climate of Missouri is extremely variable. In winter, the cold is excessive; in summer, the heat. The thermometer falls below zero, and the Missouri and Mississippi are frozen over, so that heavy-loaded wagons can cross in safety for weeks at a time. The country being open and exposed to the sun's

rays, and the soil loose and sandy, and consequently retentive of heat, the summer is exceedingly warm. The atmosphere, however, is dry and pure, and cooling winds temper the heat of summer. Bilious and remittent fevers prevail in the bottom lands during warm weather. Other portions of the state are deemed healthy, and will probably become more so as settlements increase. Pulmonic, or lung complaints, terminating in consumption, in spite of the variability of the weather, are rare; but pleurisy and lung fevers are not unfrequent in winter.

PRINCIPAL RIVERS.—Omitting the Mississippi as not flowing within the limits of the state, we may mention first, as most important among the rivers of Missouri, the stream from which it takes its name. This river rises in the Rocky Mountains, not far from the head waters of the Columbia, 3,096 miles from its mouth. The last four or five hundred miles of its course alone lie within the limits of the state; the rest flows through the Territory of Missouri. The trough through which the river flows is from two to four miles wide, and is bounded by rocky limestone hills, which rise to a height of from one to three hundred feet. Nearly all the bottoms of the Missouri are on its north side; and ordinarily, they are not subject to overflow. In this respect they differ widely from those of the Mississippi, which latter are, moreover, of greater width, and formed of soil less sandy and less easily percolated by water. The Missouri flows down an inclined plane, the upper strata of which are readily disintegrated and transported by the rapid flow of the main stream and its chief tributaries, the Yellowstone and the Platte. Its waters become thoroughly impregnated, as we find them at its mouth, with mineral and organic substances in solution or suspension, imparting to it that turbid character for which it is distinguished. The alluvial lands lying along the river are subject to being covered, during inundations, with drifting sands; they are, however, occupied by a luxuriant vegetation both of trees and herbs. These bottom lands are favorites with settlers, and they are capable of supporting a dense population. The river is navigable from its mouth to the falls, 2,000 miles from its mouth. Its valley has double the elevation of that of the Mississippi; and the average rapidity of the stream is as fast again as that of the other. In 1819 it was first navigated by a steamboat. The products of the Santa Fé and of the Indian fur trade find their way down this river. The former trade is valued at \$500,000 a year, the latter at \$300,000.

The next largest river of the state is the Osage, a tributary of the Missouri, coming in on its south side, 120 miles from its mouth. At its mouth the Osage is 400 yards wide; and is navigable for boats of a light draught for about 200 miles, at high water. About

the head waters of this stream are found the best cotton lands in the state. The Gasconade comes into the Missouri below the Osage, near the town of Hermann, and is important for the supplies of fine plank and timber which it furnishes to the country below. The Maramec is a beautiful river, running through the mineral region, and flowing into the Mississippi, 18 miles below St. Louis. Further south are the rivers St. Francis and the White, with their branches. North of the Missouri we find Salt river flowing into the Mississippi; and the Chariton and the Grand, which empty into the Missouri. Propositions have been made for improving the Osage, Grand, Salt, and Maramec; and it is expected that no long time will elapse before the desired improvements, at least in the Osage (cost, \$204,600) and the Grand, (\$19,787,) will be effected. Those proposed to be made in the former will, on estimate, save the people residing within the territory which it waters an annual aggregate of \$329,594. Other rivers than those mentioned are of minor importance.

CHIEF TOWNS.—The oldest town in the state is St. Genevieve, on the west bank of the Mississippi, about 60 miles below St. Louis. It is interesting chiefly for its early history, and for its future prospects. At present it is much decayed, though beginning again to flourish. The old village, (*Le Vieux Village*), now called the Big Field, (*Le Grand Champ*), and distant about three miles from the present town, was settled about the year 1755. The original settlers were cultivators of the soil, traders in furs, peltries and lead, and *voyageurs*. Of the old village, nothing now remains. The new town was settled, about 1785, the year of the great flood (*L'année des grands eaux*), by emigrants from Kaskaskia, in Illinois, and a portion of the inhabitants of the old town. About a year ago, the last survivor of the new town settlers, Jean Bapt. Valle, sen, died at an advanced age. The present town is located in the neighborhood of a rich mining and agricultural country, and must in time enjoy considerable commerce. When the contemplated railroad between it and the Iron Mountain shall have been finished, its prosperity will be insured. Marble and limestone abound in its vicinity. Its sand is the best in the United States for the manufacture of glass, and Boston and Pittsburg use it in large quantities in their manufactories. The village possesses, too, great advantages for manufacturing. Besides iron, there is deposited here for shipment all the lead, cobalt, and copper made in the neighboring counties of south-east Missouri.

New-Madrid, another of the first settled towns in Missouri, was founded by Jaques Olamorgan, a Scotchman, holding office under the Spanish government, in the year 1788 or 1789. Its founders and first inhabitants were men fond of adventure, intelligent, and most

of them possessed of comfortable means of living. They engaged in raising cotton, which, together with furs and peltries bought from the Indians, they exported. None of the old town is now in existence. Its fort, churches, cemeteries, and houses, have all been swept away by the encroachments of the Mississippi. In a few years no traces of the town so noted for its sufferings during the earthquakes of 1811-12 will be discoverable by the inquiring stranger. The present town was laid out back of the old, in 1820. The location is, or rather will be, good, in a commercial point of view. The chief drawback from the advancement of the town is the vast region of swamp, or submerged land, lying directly in its rear. That portion of the neighboring country which can be tilled, is rich and highly productive. When the proposed drainage of the surrounding district shall have been completed, therefore, New-Madrid will awake to new life and energy. Its annual exports reach in value about \$100,000.

The city of St. Louis, by far the largest in the state, and the largest west of the Mississippi, destined to be second only to New-Orleans in all the valley, was founded in 1664 by a company of merchants, who had an exclusive grant for carrying on commerce with the Indians on the Missouri. The city is situated on the Mississippi, on the first bluff, 20 miles below the mouth of the Missouri; and is admirably located for carrying on commerce. It has access to a vast region of country: on the north by the Mississippi and the Illinois, on the west by the Missouri, and on the south-east by the Ohio. The mighty Mississippi gives it an outlet to the ocean. Its trade surpasses that of any place on the river above New-Orleans. In 1810 its population was 1,600; in 1820, 4,598; in 1830, 6,894; in 1840, 16,496; in 1850, 77,465, of whom 2,616 were slaves. Capital invested in the city in 1850 amounted to \$3,853,351; persons employed, 7,929; annual product, \$13,908,577. Of the population, 40,414 were natives of foreign countries, of whom 23,774 were born in Germany. This emigrant population is one of the chief causes of the city's advance in wealth and prosperity. The bluff on which the city is built is composed of limestone, formed into two distinct banks: the first 20, the second 60 feet above high water. The city is thickly settled a mile and a half along the river, but extends in all six and a half miles by the curve of the river. Its breadth reaches back in all three miles; but the thickly settled part only three quarters of a mile. The houses are usually of neat construction, the most recent being built of brick, and some of stone quarried on the spot. The city contains 49 churches, valued at \$1,213,500. Of these, 12 are Roman Catholic; 12 Methodist; 8 Presbyterian; 5 Episcopal; 5 Lutheran; 3 Baptist; 2 Unitarian; 2 Evangelical; 1 Boat-

men's. There are, besides, two synagogues. There are within the city limits 44 common schools, with 2,847 pupils; 15 private schools, with 2,878 pupils; 9 Roman Catholic, with 1,356 pupils; a Catholic College with 250 pupils; and two Medical Colleges, with 14 professors and 263 students. The trade of St. Louis is, of course, extensive and increasing. Of the principal articles of trade, there were received at that point during the year 1850, 60,862 bales of hemp; 578,502 pigs of lead; 1,792,074 bushels of wheat; 325,070 barrels of flour; 101,562 barrels of pork; and 9,055 hogsheads of tobacco. The number of steamboat arrivals during the same year was 2,599. The amount of lumber received and manufactured into shingles, laths, and staves, was 29,676,099 feet.

Among the other towns in the state may be mentioned Jefferson City, on the Missouri, just above the mouth of the Osage, distinguished only as being the seat of government. Boonville, on the Missouri, above Jefferson City, in Cooper county, was settled by Daniel Boone, of Kentucky. Glasgow, in Howard, laid out in 1836, contains now 1,000 inhabitants, and is flourishing in its commerce. Lexington, in Lafayette, also on the Missouri, is a thriving place, situated in a rich region, and containing about 2,500 inhabitants. Weston, in Platte, on the same river, is a flourishing place. Independence, in Jackson, is the starting point of the Santa Fé trading caravan. St. Charles, near the mouth of the Missouri, is the most important town on that river. Potosi, in the mining district, is on the increase. Herculanum is the principal place of deposit for lead from the mines. Cape Girardeau, on the Mississippi, below St. Genevieve, has a fine harbor, and is the port of a flourishing region in the rear. Louisiana, Clarkesville, and Hannibal are most important landing-places on the Mississippi, above St. Louis. Palmyra, lying back of Hannibal, was once a thriving village, but afterwards became much decayed. It is now again flourishing, containing about 2,000 inhabitants.

MINERAL RESOURCES.—The mineral region of Missouri occupies an area of from seventeen to eighteen millions of acres, an extent of country greater than New-Hampshire, Massachusetts, Connecticut, Rhode Island and Delaware united. It was described as early as 1718, on a French chart, as *un pays plein de mines*, a country full of mines. The elevation of the district above the sea varies from 600 to 1200 feet. Its temperature is not as variable as that of other parts of the state; its climate is salubrious, and it includes much valuable agricultural land. No one of the mining districts of Europe affords such facilities for support to its population; and yet the Hartz Mountains, with an area of 800,000 acres, sustain 60,000 inhabitants; the Erzgebirge of Saxony, with a million and a half of

acres, one half a million; Cornwall in England, with 760,000 acres, 800,000 inhabitants. Populated in the ratio of the Erzgebirge, the mineral region of Missouri would contain 6,000,000 of souls. Excepting gold and platinum, most of the important and useful metals and ores are known to exist in Missouri. The following minerals, metallic and non-metallic, arranged here according to their intrinsic value, have been found within its limits: lead, iron, copper, cobalt, silver, nickel, zinc and calamine, manganese and wadd, coal, rock-salt, barytes, sand and quartz, carbonate and sulphate of lime, alumine and potters' clay, fullers' earth, variegated marble and oolite, saltpetre, antimony, tin, tungstate of iron and lead, diamonds, chalcedony and feldspar. To these, others might be added.

The lead mines of this state have been wrought from the earliest period of its settlement; but since 1827 the production of the metal has scarcely increased, many miners having been drawn away by the reports respecting the mines of Galena, in Illinois. The lead is found as a sulphuret (called also *galena*) and as a carbonate, and no mine of it has yet been, or seems likely to be, exhausted. Zinc, in the form of calamine and blende, is found mixed with it in the upper mines; that is, in Potosi and its neighborhood. The lead contains six ounces of silver per ton. It is found in Cole, Franklin, Jefferson, Madison, St. Francois, St. Louis, Washington, and several other counties. The mines of Perry and Valle are the most productive. The La Motte mines also yield abundance of this as well as other metals. It was at this mine that the workmen were taught, only a few years ago, how to reduce the carbonate, which they had hitherto cast aside as worthless. It yields 72 per cent of pure metal. The metal from the upper mines commands a better price than that from the lower; but none of it is quite equal in market value to the lead of Illinois. The ores are all easily reduced; the carbonate by means of a blast furnace. The sulphuret of Potosi yields from 70 to 80 per cent; that of La Motte, not over 66 per cent.

Iron, in the form of hematite, and the ochrey, the micaceous, and the red oxides, is found in the greatest abundance. In this respect, and in facilities for the manufacture and transportation of the article, Missouri cannot be equalled by any other state of the Union. The metal is found throughout the whole mineral region, and extends even into the coal formation, which occupies the rest of the state. Her celebrated mountains of micaceous oxide of iron, the Iron Mountain and the Pilot Knob, are almost inexhaustible. They are the eastern extreme of the Ozark Mountains, the range in the outskirts of which the mineral region is included, and are situated in St. Francois county, a few miles south-east of Potosi, and about forty miles from the town of St. Gene-

vieve. The two peaks are about six miles apart. The more northerly of the summits, the Iron Mountain, is a mile and a half long, one mile broad, and 444 feet high. The whole top of the mountain is a solid sheet of iron, and one sees nothing but iron lumps as far as the eye can reach. The ore yields 60 per cent. of pig metal, which is deemed, in the market of St. Louis, superior to that of Tennessee. Edge tools have been manufactured and forged from the crude ore. The Pilot Knob is larger than the Iron Mountain, being not less than 1,500 feet high, and extending, some say, a mile from the base to its summit. This, however, is an erroneous statement. Dr. Feuchtwanger estimates the quantity of pig iron imbedded in the mountains at 600,000,000 of tons, enough to supply the world for more than a century. The mines of Elba, of Sweden, or of Norway, do not contain the same amount of metallic iron ore. The operation of smelting the ore is now carried on with diligence at the mountains, and the pig iron is transported in wagons, at the cost of one quarter of a cent a pound, to St. Genevieve. The contemplated railroad between the two points will, when constructed, give a new impulse to the mining operations. It is only of late years that the iron mines of Missouri have been wrought; and even now the manufactories do not produce enough to supply the foundries of St. Louis, that city being obliged to import a large quantity of Scotch pig iron, an inferior article, for which as much again is paid as metal of the best quality can be produced for within the limits of the state.

Copper is, perhaps, destined to be the most valuable mineral production of Missouri. The ores of this metal are found throughout the mineral region, but chiefly to the south and west of the mine La Motte. The ore is of every variety, and usually very rich. It is found combined with iron, lead, and frequently manganese, cobalt and nickel. It is generally pyritous, but oxides and carbonates are frequently found. A very rich mine, called Buckeye, of argentiferous copper, combined with cobalt and nickel, was discovered a few years since, about five miles south of the mine La Motte. A shaft has been sunk in it to the depth of one hundred feet, discovering large veins rich in ore. The ores appear to be, in general, a cement uniting angular fragments of lime rocks, forming a breccia; and much of it is easily removed by the pickaxe alone. Three fourths of the ore yields more than 34 per cent. of metal. It is probable that the main lode of the deposit has not yet been reached. The ore as it comes up is worth \$75 a ton. As yet, regular systematic mining for copper has not begun in the state, except on a small scale in the vicinity of the two or three smelting establishments previously in operation. It is expected that copper mining will be carried in this state to depths rivalling

those of the celebrated mines of Wales and Germany. The mines are considered more valuable than those on Lake Superior. Indications of extensive and heavy lodes of the metal have been traced for miles, situate, a great part of the distance, in public land, liable to entry at \$1.25 an acre. The ore needs but little cleansing, and is often smelted in the condition in which it is thrown up from the mine.

Zinc ore, in the form of calamine and sulphuret, are often discovered in abundance in mining for lead. They are, as yet, deemed valueless, but will, no doubt, be turned to profitable use with the advance of metallurgic information.* *Manganese* ores are also very abundant, and must in time be sought for with avidity.† *Cobalt* has become an object of exploration. It is usually found associated with nickel, in the form of the sulphuret or the black oxide. An apparatus for the preparation of cobalt oxide has been fitted up at the mine La Motte, and it is estimated that the tract will produce from three to five thousand pounds of the article per annum. The fact of the existence of this ore, to any valuable extent, is only a very recent discovery.‡ *Nickel*, which, with cobalt, is the most valuable, intrinsically, of the metals, after silver, has not yet been extracted in any form to any considerable quantity §

Silver is not found in this state in mines, nor, is it likely, will be. But all the ores of lead contain it; many of them in quantities that will justify its extraction by the well-known and simple process of crystallization, practised successfully on the Missouri lead by capitalists in England. Three hundred and fifty pounds of pure silver were obtained from 1,000,000 lbs. of lead; 100 lbs. of the latter containing one half an ounce of the former.

*In commerce zinc is often known under the name of *spelter*. Being a cheap and light metal, and one which, after having been superficially oxidized, long resists the further action of air and water, it has been much used of late years as a substitute for lead in lining water cisterns and covering houses. It is employed, also, in the operation of transferring printing, called *zincography*.

† Manganese, in the form of the *black oxide*, (a compound containing one part of the metal and two of oxygen,) is extensively made use of as a source of oxygen, and is particularly valuable on account of the use made of it in decomposing common salt for the production of chlorine. Some of the proto-salts of the metal are employed in calico printing to produce brown colors, and occasionally as deoxidizing agents.

‡ The oxide of cobalt is nearly black, but when existing as a hydrate, or when largely diluted by fusion with glass or borax, it produces its well-known blue color. This color being permanent at very high temperatures, this oxide is an invaluable article in the manufacture of porcelain and pottery, all the blue colors of which are derived from it. Fused with glass, it imparts a blue tint without impairing its transparency.

§ Since the commencement of the manufacture of German silver, (argentan,) nickel has become an article of considerable commercial importance. It is most usually found in combination with the ores of cobalt. Its separation is a complicated process.

Some of the lead ore of Missouri, analyzed by Dr. King, was found to contain an amount of silver equal in value to the lead. *Zinc* has been found near Caledonia, but not in sufficient quantities, it would seem, to justify working. *Gold* has not been discovered in Missouri. It will probably never be found in placers, but may be in combination with other metals.

In minerals of the non-metallic kind, Missouri abounds. The carboniferous limestone formation, on which St. Louis is built, and which extends throughout the northern division of the state, forms a beautiful and compact building material. Some of the layers abound in a species of coral, the stone from which presents a fine appearance when polished. Other layers furnish an excellent lime; and it is thought by Dr. Prout that some are sufficiently aluminous to make a good hydraulic cement. *Sandstones* are abundant, but are of too loose a texture and too coarse-grained to be used as a building material, though some species would answer very well for flag-stones. The white sandstone of St. Genevieve makes superior glass. *Porphyries*, some of them having a red ground interspersed with crystals, and susceptible of a high polish, are numerous in southern Missouri. They are well fitted for architectural and ornamental uses. *Syenite* is also found, but it is too coarse and loose of texture to answer building purposes.

Marbles are found in different parts of the state. They are usually of a highly crystalline character, and traversed sometimes by veins of different colors, which impart to the marble a beautiful appearance. Several varieties are found in the vicinity of Pilot Knob Mountain. *Gypsum*, or sulphate of lime, from which plaster of Paris is made by heating the gypseum, has been discovered in Jackson county, extending in a regular layer some distance along the bank of the Missouri. It may prove very valuable in agriculture. *Saltpetre* is known to exist in caverns on the banks of the Maramec, Current and Gasconade. *Sulphate of baryta*, or heavy spar, is found in the lead diggings.

Coal exists in abundance in the northern part of the state. It is, in general, what is called bituminous coal. At Côte sans Dessein, however, it assumes the form of cannel coal, a variety which contains less bitumen and more carbon than the other. It has been discovered at several distinct points in Cole and Callaway counties, and as high as 40 miles upon the Osage. Some of its layers are of a great thickness. On distillation, this coal furnishes an excellent coke, and gives out gas of a fine illuminating power. It burns with a bright and copious flame, and leaves but little ashes. Being destitute of sulphur, it is well adapted to furnaces and manufacturing purposes.

Clays, useful for economical purposes, are

found in different parts of Missouri. The subsoil of the region around St. Louis, abounding as it does in oxide of iron and alumina, makes brick of a very handsome red tint and smooth texture. It is fitted, too, for the manufacture of pottery. Variegated clays are found in the same vicinity. Kaolin (the Chinese name for porcelain clay) and pipe clays, of which porcelain and earthenware may be made, have been discovered near Caledonia and near Cape Girardeau. Delftware is manufactured in St. Louis from clay obtained near Commerce, in Scott county.

INTERNAL IMPROVEMENTS.—Missouri is far in the rear of other newly settled states, as regards works of internal improvement. There were in the state, at the beginning of 1850, five Macadamized roads, commencing at the city of St. Louis, neither of which, however, were in use more than a few miles beyond the city limits; a railroad in progress of construction from Independence to the Missouri river, a distance of about three miles; and certain improvements had been made on the Osage river, at a cost of about \$18,570. Common roads and bridges excepted, these were all the public improvements made up to 1850, in the state. Charters for sundry railroads—one running from Palmyra to the Mississippi, one from Hannibal to St. Joseph's, one from Independence to White River, one from Alexandria to St. Francisville, in Clark county, and another from Lexington, Lafayette county, to the Mississippi—have been obtained from the legislature; but it is probable that no further steps will be taken for some time towards constructing at least the second, third, and fifth mentioned roads. The obtaining a charter has been the only noteworthy event in the history of most railroad enterprises in Missouri. We have learned by verbal communication, that a plank road is being constructed, in lieu of the proposed railroad from St. Genevieve to the Iron Mountain. The work is being carried on with zeal. Measures are being taken also for the construction of a plank road from Cape Girardeau to Jackson. The amount of \$30,000 has been subscribed for the purpose. The work has been commenced.

Manufacturing and mining are in advance of internal improvements. The amount invested in both would not, it is thought, have exceeded, in 1850, \$2,000,000. Few states possess more manufacturing facilities than Missouri, but as yet only a few factories are in operation. In 1840 there were in the state, according to the census, 9 woollen manufactories, 6 in Calloway and 3 in Pike, with 13 workmen, a capital of \$5,100, and goods produced to the value of \$13,750. There are no cotton or silk manufactories. Home-made cotton goods, of family wearing, amounted in value to \$1,149,544. Several bale rope and bagging factories were in operation on the Missouri, and two in St.

Louis.* The statistics of 1840 show that the lumber trade of that year produced \$70,855, and that there were sold 198,032 horses and mules, 438,875 neat cattle, 348,018 sheep, 1,271,161 swine, and poultry to the value of \$270,647. Since that time all these articles of trade have increased in yearly quantity, as also the agricultural products of the state. We have no means at present of ascertaining the precise increase.

POPULATION.—From 1848 to 1850 the state increased 92,936 souls, or nearly sixteen per cent. in population, notwithstanding the large emigration to California. The ratio of increase of the whites and that of the slave is nearly exactly the same. In the 100 counties of the state there resided, in 1848, 588,971 people; in 1850, 682,907, of whom 595,140 were free, and 87,769 slaves. Next to St. Louis county, which contained 105,064, Platte county, containing 16,929, had the greatest number of inhabitants.

EDUCATION.—The state supports common schools, which seem to be working well. It contains, beside these and private schools and academies, five colleges: the University of St. Louis, a Roman Catholic institution, located in

St. Louis, and founded in 1829; St. Mary's College, at Barrens, also Catholic, founded in 1830; Marion College, at New Palmyra, founded in 1831; St. Charles College, Methodist, at St. Charles, founded in 1839; Fayette College, at Fayette, and Missouri University, at Columbia, founded in 1840. They could number in all, in 1840, about 500 students. The University of Missouri had, in 1850, 154 medical students, 6 seniors, 13 juniors, 10 sophomores, 21 freshmen, and 30 in the preparatory department. The President is Rev. James Shannon, A. M.: the professors are—W. W. Hudson, A. M., Math., Nat. Philos. and Astronomy; E. H. Leffingwell, A. M., Chem., Mineral, and Geology; R. F. Barrett, M. D., Physiol. and Mat. Medica; J. M. McDonell, M. D., Anat. and Surgery; J. S. Moore, M. D., Theory and Prac. of Medicine; R. S. Thomas, A. M., Metaph., Rhet. and Logic; G. H. Matthews, A. M., Anc. Languages; John B. Thompson, M. D., Pathol. and Clin. Medicine; R. A. Grant, A. M., tutor of Mathematics; W. C. Shields, A. B., tutor of Languages; J. S. Moore, M. D., Dean of Med. Faculty; I. J. Hodgen, M. D., Demonstr. of Anatomy; R. S. Thomas, A. M., Librarian.

In 1840 the Methodists had 51 travelling preachers in the state; the Baptists, 86 ministers and 146 churches; the Presbyterians, 17 ministers and 38 churches; the Roman Catholics, one bishop and 30 priests; the Episcopalians, three ministers. (See St. Louis.)

*The subjoined extract from the message of Gov. Edwards, for 1846, sets forth the principal supposed causes which retard the advancement, as well as those which tend to promote the establishment, of manufactures in Missouri:

"The establishment of manufactures is attended with its difficulties. To carry them on very successfully, large investments and a superior population are required. We are not without capital, but the high rate of interest, and the many supposed profitable investments for money which have heretofore existed, have prevented the appropriation of funds to the erection of manufacturing establishments. If the rate of interest were lower, capital would be profitably invested in manufactures to a considerable extent. The tariff, also, retards the establishment of manufactures in our state, whether it be a tariff for protection, or a tariff for revenue, for all tariffs for revenue are tariffs for protection to a greater or less extent; but a high tariff tends more to prevent the establishment of manufactures in our state than a low one, being a protection to the eastern manufacturer. The eastern manufacturer contends that he cannot succeed without protection against his foreign competitor. Our interior position, and our remoteness from the principal ports of entry, give the manufacturer in this country a protection which no tariff can immediately affect. If, then, the eastern manufacturer was but lightly protected, or not protected at all, he would find it profitable to remove his capital, and to invest it in manufactures in the west, where nature would always protect him against the foreign competitor. No country can manufacture cheaper than our state. We have all the necessary ingredients at the lowest prices. We have the real estate, the water power, the ore to make the iron to make the machinery, the manual labor, the provisions to support the hands, the raw material, the flax, hemp, and wool of our own production, and the cotton in exchange for our wheat, corn and tobacco, hogs, horses, cattle and mules; and these ingredients we have, taken together, cheaper than any other country on earth. Even our manual labor is at the lowest price. But, as before observed, to manufacture very successfully, a superior population is required. This we can soon have by fostering the common school, and developing the genius and mechanical ingenuity of the youth of our country."

MISSOURI.—MINERAL WEALTH.—Dr. Lewis Feuchtwanger gives us this summary:

The mineral wealth of Missouri has long been proverbial. The discovery of lead in 1715, and the production of 9,000,000 pounds in 1846, must naturally attach sufficient importance to this State. Latterly, also, iron has been made very conspicuous in it, especially since attention has been drawn to the iron mountains of southern Missouri, which, according to my approximate calculation, contain not less than 600,000,000 tons of iron in their bowels. A short time ago, (1847,) a report was made by Dr. King on the subject of erecting more furnaces on a new locality on the Mississippi river, called Birmingham, and he says that iron exists in that particular spot in great abundance. One ridge, which is called the *Iron Ridge*, contains an immense deposit of *hydrated brown oxide*, averaging from fifty to sixty per cent. cast iron, which shows itself for several acres over the summit of the ridge, and extending down its flanks on each side of the adjoining ravines, where the ore may be seen in thick masses.

As regards iron in the state of Missouri, it appears as plenty there as coal in Pennsylvania; and wherever it is situated, appears to lie in such huge masses, like the coal mines in Mauch Chunk, Pennsylvania.

Next to iron is COPPER of great importance to the state of Missouri. Large tracts, con-

taining this valuable ore, have been discovered on Current river; and on Maranac river, and in the southern part of the state, very good veins of copper have been discovered, and wrought to some advantage. In Jefferson county, a very good prospect of copper mines may be seen.

COBALT is an ore of no less importance than the former. It occurs in the form of black oxide and sulphuret, and is found either in thin layers, in lead mines, accompanying the *drybone*, (carbonate,) or in connection with manganese, which is found to contain the cobalt from five to fifty per cent.

ZINC, in the form of sulphuret and carbonate, or calamine, is found in great abundance in the lead mines, where it appears to form the lens, or shell of the veins of lead, it being found on the upper and lower crust of the rock. It is thrown away as useless by the miners, although there are imported into this country over \$200,000 worth annually.

SILVER.—It is ascertained that the average of silver contained in all the Missouri lead ores is from six to eight ounces to the ton; but it has never been attempted to separate the same before bringing the lead in market.

NICKEL.—This rare ore has been found to accompany the copper and cobalt, particularly in localities where the latter is found in a state of sulphuret and combined with the copper ore. One shipment of a mixture of the three metals, averaging in the greatest part the copper, and cobalt and nickel in smaller proportions, has been made a year ago from Mine la Motte, and I understand it has proved profitable.

MANGANESE abounds all over the southern part of the state of Missouri.

Among the non-metallic substances, **BARYTES** deserves a conspicuous place in this state; for it is found here in great abundance, and of a beautiful white color, suitable for admixture with white lead.

MASSACHUSETTS—HER PRODUCTIVE ENERGIES AND SPIRIT (1849).—During the past summer we had the satisfaction of visiting Massachusetts, and inspecting for ourselves the extraordinary enterprise and industry which has given it character among the first of ancient or modern states. All the documents were kindly put into our possession by the Hon J. G. Palfrey, Secretary of State, from which the most complete notions may

be formed. Whatever displeasure as a southerner we may have expressed, and however often we may have expressed it, in relation to the unauthorized and illiberal course pursued by Massachusetts in reference to our institutions and our rights, we cannot but admire her in the position in which she is truly admirable, and proclaim her honor to the world. As a great sister of our confederacy, we are bound to respect her, despite even of her faults. The paper which we now present will be in this spirit of candor and fellowship, and it is our intention to present similar papers, having a like reference to each of the states of the Union. In this matter, as in others, we must solicit the aid of their citizens.

The state is supposed to have derived its name from one of its tribes of Indians. The stormy and troubled periods of its early history will be at once called to memory. Bancroft, one of her own sons, has done ample justice to this epoch—moderating, as much as could be, the asperities it so frequently presents.

There are fourteen incorporated counties in the state, their charters dating from 1643 to 1812. There are also an immense number of towns or districts, presided over by Selectmen, from 3 to 7 in number each.

The college and school system of Massachusetts is the most complete of our times. A Board of Education was established in 1837. Large annual volumes of Reports and Abstracts have been published regularly from that time. The Secretary of the Board, Horace Mann, has published, for several years, an Educational Journal. There are also Normal schools and Teachers' Institutes, for the preparation of instructors. The number of lyceums and public libraries in the state evidences the great educational spirit. There is an Atheneum, an Academy of Arts and Sciences, a Society of Natural History, and three Musical Associations in Boston, also an American Oriental Society, an American Statistical Association, and a Historical Genealogical Society. There are three Historical Societies in the state: at Boston, at Dorchester, and at Salem; also an American Antiquarian Society at Worcester. The following table will show the number of agricultural societies, and the amounts they have received from the state's munificence:

AGRICULTURAL SOCIETIES OF MASSACHUSETTS.

	Date of Incorporation.	Date of First Payment.	Total amt. received.
Massachusetts Society for promoting Agriculture	March 7, 1792	Oct. 29, 1817	\$18,300 00
Western Society of Middlesex Husbandmen	Feb. 28, 1803	Jan. 12, 1820	14,340 80
Name changed to Society of Middlesex Husbandmen and Manufacturers	Jan. 24, 1820	Oct. 29, 1817	13,736 50
Berkshire Agricultural Society	Feb. 25, 1811	Oct. 13, 1819	16,300 00
Hampshire, Franklin, and Hampden Agricultural Societies.	Feb. 10, 1818	Jan. 12, 1820	16,200 00
Worcester Agricultural Society	Feb. 23, 1818	Jan. 12, 1820	15,140 40
Essex Agricultural Society	June 12, 1818	Jan. 12, 1820	12,854 40
Agricultural Society in the County of Plymouth	June 11, 1819	Oct. 27, 1820	7,346 32
Bristol County Agricultural Society	June 14, 1823	Nov. 5, 1824	1,200 00
Agricultural Society of the County of Hampden.	March 5, 1844	Feb. 11, 1845	115,816 61
Barnstable County Agricultural Society	March 15, 1844		

There are two Horticultural Societies; the Fair of the one at Boston, in September last, we attended, and were surprised to witness the show of splendid fruits and flowers from such a region. There are two institutes for the insane. We cannot even refer to the various religious associations. Mr. Elliott, of Boston, estimates the charities of Boston for thirty years past at near \$8,000,000 in all, private and unseen benevolence being of course not included in the estimate. Among the numerous societies, we note one for the *prevention of pauperism*, one for *penitent females*, (we suppose of the town,) and one for the *aid of discharged convicts*. The *Non-Resistance Society* is characteristic, as is also the *Anti-Slavery*, with 25 auxiliary, and God knows how many *Abolition Societies*, which began, perhaps, as anti-slavery. There is a Society for the *Abolition of Capital Punishment*. Massachusetts abounds in Banking Institutions, as we shall see by and by. There

* The cattle show and fair of this Society, at Pittsfield, in 1814, was the first held in this country.

are 88 Institutions for Savings in the state. The Railroad Corporations would occupy a chapter of themselves.

The following table and extract is taken from Dr. Chickering's admirable work published last year:

POPULATION OF MASSACHUSETTS, BOSTON, ETC.

MASSACHUSETTS					BOSTON.					NEW COUNTRY TOWNS.				
Increase in 10 years					Increase in 10 years					Increase in 10 years				
Year	Census	Amount	Per cent	Average increase per cent per an	Year	Census	Amount	Per cent	Average increase per cent per an	Year	Census	Amount	Per cent	Average increase per cent per an
1790	378,787	44,058	11.62133	1.1068	1830	18,380	6,617	36.11893	3.132	1860	390,467	87,441	22.39690	2.280
1800	462,845	46,195	11.62428	1.1068	1840	24,937	8,849	35.48843	3.063	1870	437,008	103,445	23.66831	2.366
1810	472,040	46,195	11.62428	1.1068	1850	33,767	9,511	28.17894	3.111	1880	438,953	103,445	23.66831	2.366
1820	523,297	61,247	10.86649	1.0389	1860	48,286	9,511	19.70454	2.111	1890	479,080	141,736	29.60236	2.967
1830	610,408	87,191	16.64879	1.5319	1870	61,392	18,064	29.41785	3.253	1900	549,016	96,087	17.33965	1.737
1840	737,700	137,298	20.86359	1.91913	1880	61,392	31,991	52.10639	4.253	1910	644,317	96,301	14.94381	1.495
Increase in 50 years, Census, 1840					Increase in 50 years, Census, 1840					Increase in 50 years, Census, 1840				
358,912					75,063					363,840				
1,000					19,330					1,000				
737,700					98,388					864,817				
1,000					1,000					1,000				
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of 9.1811 per cent in five years; of 19.2054 per cent in ten years; and 42.0992 per cent in twenty years. In thirty years the increase at the same rate would be 169,416, or 69.8990 per cent. At the average rate of 9.1811 per cent increase in five years, the number would be 266,565 in 1770; 291,089 in 1775; 317,760 in 1780; 346,984 in 1785.

"The average increase of Massachusetts, in each period of ten years, from 1765 to 1790, was 19.2054 per cent.; and from 1790 to 1840, 14.2606 per cent.

"The average increase of Massachusetts, in each period of twenty years, from 1765 to 1790, was 42.0992 per cent.; and from 1790 to 1840, 30.5551 per cent.

"The average increase of Boston, in each period of ten years, from 1790 to 1840, was 38.506 per cent.; and of the rest of the state, only 12.3178 per cent.

"The increase of Massachusetts, from 1765 to 1840, was 493,551, or 202.1515 per cent.; of Boston, 77,863, or 501.6945 per cent.; and of the rest of the state, 415,688, or 181.8177 per cent.

"The average increase of Massachusetts, from 1765 to 1840, in each twenty-five years, was 44.5688 per cent.; in each twenty years, 34.2950 per cent.; in each ten years, 15.8867 per cent.; in each five years, 7.6508 per cent.; and in each year, 1.4853 per cent. This last is .1433 per cent. per annum greater than 1.3420 per cent, the rate from 1790 to 1840.

"It will appear from these statements, that the average increase of the population of Massachusetts was greater from 1765 to 1790 than it has been since. Had the rate continued the same, the number would have been 911,749 in 1840. Also, the increase of Boston was, on an average, much less during the first twenty-five years than that of the other parts of the state, and much greater during the last two periods of twenty-five years each, showing a tendency to centralization in Boston."

The number of paupers in Massachusetts is large: 15,261 were supported by the state in 1846; net amount expended in their support, \$301,707 08, the state supplying \$33,852 of it. In all her precision and system we regret that Massachusetts excludes in her statistics all reference to her black population. Can this be designedly? Surely this class of population is sufficiently large there to attract especial notice. Why is there, then, not a single syllable in all of her documents relative to them? This is not so in slave states. We are not content here without knowledge of the condition, prospects, and improvement of the blacks. Does not Massachusetts owe it to her sister states to show the results of her benevolent systems upon those who were formerly her slaves, and whom, as she tells us, she has been endeavoring to improve? Let us know their condition now, and their

advances. Let us see the results of your experiment. You are not silent in meddling with our affairs—excuse the want of courtesy betrayed in thus intermeddling in yours. We want facts.

Pass we now under review some of the volumes of Massachusetts State Documents.

1. *Statistics of her Industry*, published by the Secretary, 1845. These are not regarded complete by that officer, from the indisposition of manufacturers, &c., to give full information of their affairs.

PRODUCTS OF MASSACHUSETTS, 1845.

Articles.	Value.	Capital Invested.	Hand ^o empl.
Anchors, Chain Cables, &c.....	\$688,966	\$377,685	423
Axes, Hatchets, and other edge tools...	94,441	48,925	94
Beef, &c., slaughtered	325,918	—	—
Beeswax.....	981	—	—
Berries.....	10,842	—	—
Blacking.....	10,422	—	35
Bleaching or Coloring	2,166,000	900,500	211
Blocks and Pumps...	127,249	—	204
Boats.....	82,943	—	164
Boots and Shoes.....	14,799,140	—	45,877
Boxes of all kinds...	216,105	—	236
Brass articles.....	331,890	167,600	145
Bricks.....	612,832	—	1,407
Britannia Ware.....	102,550	49,350	93
Broom Seed & Brush	86,111	—	—
Brooms.....	200,814	—	313
Brushes.....	153,900	68,875	220
Butter.....	1,116,709	—	—
Buttons, metal.....	56,080	51,500	60
Butts or Hinges.....	25,390	3,500	49
Calico.....	4,779,817	1,401,500	2,053
Candles Sperm, & Oil	3,613,796	2,461,917	306
Candles Tallow, and Soap.....	836,156	406,872	342
Cannon.....	82,000	120,000	48
Cards.....	323,645	171,500	147
Carpeting.....	884,322	468,000	1,034
Cars, Railroad carriages, and other vehicles.....	1,843,576	553,434	1,881
Chairs and Cabinet Ware.....	1,476,679	477,874	2,504
Cheese.....	308,174	—	—
Chemical Preparations.....	331,965	251,700	113
Chocolate.....	81,672	47,500	27
Clocks.....	54,976	10,350	40
Coal, Mineral, & Iron Ore.....	21,660	—	78
Combs.....	198,965	73,100	240
Cooperage.....	269,825	—	457
Copper.....	610,950	229,000	197
Cordage.....	908,321	543,930	647
Cotton goods of all kinds.....	12,193,449	17,788,000	20,710
Cutlery.....	168,176	69,725	197
Dyeing.....	98,700	—	114
Earthen and Stone Ware.....	52,025	15,500	72
Engines, Fire.....	37,800	—	42
Engines and Boilers, Steam.....	208,546	197,000	221
Firearms.....	960,819	789,848	357
Fishery, Mackerel and Cod.....	1,484,137	1,238,640	7,866
Fishery, Whale.....	10,871,167	11,085,910	11,378
Flax.....	665	—	—
Flour and other Grain	174,806	44,650	80
Fringe and Tassels...	54,800	11,700	106
Fruit.....	744,540	—	—
Gins, Cotton.....	45,444	75,000	48
Glass.....	758,300	700,200	689
Gline.....	887,575	283,675	253
Grain.....	2,225,229	—	—

Articles	Value	Capital invested	Hands emp.	Articles	Value	Capital invested	Hands emp.
Hats and Caps.....	734,947	—	1,003	Woolen Goods of all kinds.....	8,877,478	5,004,002	7,372
Hay.....	5,214,836	913,703	—	Worsted Goods.....	654,566	514,000	846
Hollow Ware and Castings, other than Pig Iron.....	1,280,141	713,970	1,967	Stoves, Bread, Beer, Books and Stationery, Balances, Matches, Lamps, Pickles, Paper Hangings, Types, Umbrellas, &c.....	4,758,384	1,367,760	3,222
Honey.....	13,306	—	—	Total.....	114,478,443	50,145,767	152,706
Hops.....	32,351	—	—				
Hosiery and Yarn.....	94,892	42,600	238				
Instrumenta, Mathematical, &c.....	54,050	—	68				
Iron, Pig.....	143,761	155,000	235				
Iron Railing, Fences and Scaffs.....	120,300	58,000	87				
Jewelry, includ. Chronometers, Watches, Gold & Silver Ware.....	305,623	126,225	293				
Lenses.....	80,146	—	84				
Latches and Door Handles.....	3,200	750	10				
Lead Pipe, and Lead Manufactures.....	90,880	72,700	50				
Lead, White, and Paints.....	354,366	258,500	108				
Leather.....	3,836,637	1,900,545	2,043				
Lime.....	43,629	—	80				
Linen Thread.....	145,000	78,000	192				
Linseed Oil.....	181,100	77,000	34				
Locks.....	60,079	23,009	75				
Lumber and Shingles.....	921,106	—	2,306				
Machinery.....	2,092,048	1,103,850	2,421				
Maple Sugar.....	41,443	—	—				
Marble.....	220,004	—	312				
Milk.....	304,917	—	—				
Millet.....	8,476	—	—				
Musical Instruments.....	548,625	283,100	427				
Oil, Lard.....	219,900	91,000	37				
Oil (see Candles and Fishery).....	—	—	—				
Paper.....	1,750,273	1,144,587	1,269				
Pens, Steel.....	15,000	5,000	12				
Ploughs and other Agricultural Tools.....	121,691	68,575	158				
Potatoes.....	1,309,080	—	—				
Poultry and Eggs.....	25,891	—	—				
Powder.....	165,500	120,000	49				
Rolled and Silt Iron, and Nail.....	2,478,300	1,906,400	1,729				
Saddles, Harnesses and Trunks.....	492,794	144,540	648				
Salt.....	79,980	309,285	584				
Sashes, Blinds and Doors.....	180,181	—	215				
Scythes.....	113,935	96,590	171				
Seeds.....	4,721	—	—				
Shoe Pegs.....	18,206	—	—				
Shovels, Spades, Forks and Hoes.....	275,212	123,950	259				
Silk, Raw.....	952	—	—				
Silk, Sewing.....	150,477	88,900	156				
Snuff, Tobacco, and Cigars.....	324,639	—	572				
Soap, (see Candles).....	—	—	—				
Starch.....	119,940	37,500	39				
Stone, Building.....	1,063,569	—	1,849				
Straw Bonnets and Hats, Palm-leaf.....	1,049,496	—	13,311				
Sugar, Refined.....	940,000	416,080	106				
Tacks and Brads.....	253,687	123,235	209				
Teasles.....	3,808	—	—				
Tin Ware.....	793,624	343,710	719				
Tobacco raised.....	16,686	—	—				
Tools, Mechanics.....	161,899	—	256				
Upholstery.....	354,361	124,700	276				
Vegetables, other than Potatoes.....	515,082	—	—				
Vessels.....	1,172,147	—	1,017				
Whips.....	111,947	—	528				
Wood (Fire), Bark and Charcoal.....	1,033,656	—	2,925				
Wooden Ware.....	416,396	—	606				
Wool.....	365,180	—	—				

2. *Railroad Reports*.—There are annual volumes published. From the one published in 1847 for 1846, we note twenty-eight corporations. The fatal accidents on all during the year are nine—seven not fatal; others supposed not given. Among the information given is that relative to stock of companies, cost of roads and buildings, characteristics of roads, results of the year, expenditures, income, motive power, dividends, &c. All of these evidence wide prosperity, and deserve to be studied in every part of the Union. In 1818 there was not a single mile of railway in New-England, save a short wooden track. The capital invested in railroads by Massachusetts men in 1846, was estimated at \$37,000,000; it must be now fast verging upon \$50,000,000.

8. *State Lunatic Asylum*.—Six hundred and thirty-seven insane persons have had the privilege of the institution during 1846.

OCCUPATIONS OF THOSE ADMITTED.

	1846.	Previously.
Farmers admitted.....	30	279
Merchants ".....	12	86
Laborers ".....	31	178
Shoemakers ".....	2	80
Seamen ".....	18	80
Carpenters ".....	8	57
Manufacturers ".....	1	35
Teachers ".....	3	81
Students ".....	6	31
Blacksmiths ".....	2	22
Printers ".....	1	90
Tailors ".....	1	14
Clergymen ".....	2	12
Lawyers ".....	0	6
Physicians ".....	0	6
Females not accustomed to labor.....	0	177
Females accustomed to sedentary employment.....	4	240
Females accustomed to active employment.....	66	432
Many not classed, particularly females.		

4. *Common Schools*.—The Report of the Secretary of the Board, a considerable volume, contains the particulars in relation to all the school districts, &c. From the concluding pages we extract a passage:

"And the calamities which spring from ignorance, and a neglect of the social condition of the masses of the people, are no exception to this rule. Republics, one after another—a splendid yet mournful train—have emerged into being; they have risen to greatness, and surrounding nations have sought

protection beneath the shelter of their power; but they have perished through a want of intelligence and virtue in the masses of the people. They have been delivered over to anarchy and thence to despotism; and because they would not obey their own laws, they have been held in bondage by the laws of tyrants. One after another, they have been blotted from the page of existence, and the descendants of a renowned and noble ancestry have been made bond-men and bond-women; they have been dishonored and trampled upon, on the very soil still choral with the brave deeds of their forefathers. Has a sufficient number of these victim-nations been sacrificed, or must ours be added to the tragic list? If men had been wise, these sacrifices might have been mitigated, or brought to an end, centuries ago. If men are wise, they may be brought to an end now. But if men will not be wise, these mournful catastrophes must be repeated again and again, for centuries to come. Doubtless, at some time, they will come to an end. When the accumulation of evils shall be so enormous and overwhelming that humanity can no longer endure them, the adequate efforts for their termination will be made. The question for us is, has not the fulness of time now come? Are not the sufferings of past ages, are not the cries of expiring nations, whose echoes have not yet died away, a summons sufficiently loud to reach our ears, and to rouse us to apply a remedy for the present, an antidote for the future? We shall answer these questions, by the way in which we educate the rising generation. If we do not prepare children to become good citizens; if we do not develop their capacities; if we do not enrich their minds with knowledge, imbue their hearts with the love of truth and duty, and a reverence for all things sacred and holy, then our republic must go down to destruction, as others have gone before it; and mankind must sweep through another vast cycle of sin and suffering, before the dawn of a better era can arise upon the world. It is for our government, and for that public opinion, which, in a republic, governs the government, to choose between these alternatives of weal or woe."

The volume of extracts from School Re-

ports for 1844, contains 340 pages. That some idea may be formed of the immense labor expended upon it, the following extract is introduced:

"On the 1st of May last, therefore, I found myself in possession of the School Committees' Reports for two years. Each set of these was more voluminous than for any former year. Together, they were equal to fifty-five hundred closely written letter-paper pages. Every one of these I have carefully read. Taken as a whole, they are documents of extraordinary interest and value. From them, the present volume of the Abstracts, more select than any of its predecessors, has been compiled. I earnestly recommend its perusal to every friend of popular education in Massachusetts—especially to all school committee-men and teachers."

5. Registration of Births, Marriages, and Deaths.—These are volumes published annually. We have four of them before us—the one of 1842 being the first published under the state law. These cannot be too highly commended when properly kept. They present at all times an index to the actual condition of a people. The system of Massachusetts is deserving of universal imitation in other states, and we hope to see something of the kind before long.

The volume for 1845 contains an admirable letter to the Secretary, by that able statistician, Lemuel Shattuck, Esq., of Boston. We make no apologies for presenting to our readers some of the striking results which it unfolds:

PRODUCTIVE CLASSES.

From this statement it appears that, while the whole United States had 52.35 per cent. of the population of the productive class, between 15 and 60, Massachusetts had 59.65 per cent, and England 56.70; showing this state to be better situated, in this respect, than either. In the aged class it appears, however, that England had 7.20 per cent, while this state had but 6.74—a result in favor of the longevity of that country. Some counties compare better than others or the whole state. Boston has 64.65 per cent.—the greatest proportion of the productive class; and only 2.93 per cent.—the least of the aged.

PROPORTION OF BIRTHS, MARRIAGES, AND DEATHS, IN EUROPE.

STATES.	Period of Observation.	Annual number of Marriages, Births and Deaths, to 100 persons living, or per cent.			Number of persons living to one annual Marriage, Birth, and Death		
		Marriages, per cent.	Births, per cent.	Deaths, per cent.	Marriages, One in	Births, One in	Deaths, One in
England.....	1830-1842	.770	8.200	2.209	130	31	45
France.....	1840-1842	.825	2.837	2.397	121	35	42
Austria.....	1839-1841	.807	3.874	2.995	124	26	33
Prussia.....	1839-1841	.887	8.767	2.658	113	27	38
Russia.....	1842	1.013	4.284	3.690	90	23	26

MARRIAGES IN MASSACHUSETTS, 1845.—BELGIUM, 1841.

AGE.	Number of persons married in				To 10,000 married, there were in			
	Massachusetts.		Belgium.		Massachusetts.		Belgium.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Under 20.....	58	690	757	2,625	198	2,683	312	1,105
20 to 25.....	1,308	1,422	4,580	6,996	4,997	5,324	1,864	2,867
25 to 30.....	952	446	9,420	8,067	3,564	1,670	3,877	3,320
30 to 35.....	247	79	5,497	3,841	936	296	2,262	1,681
35 to 40.....	81	17	2,488	1,719	303	64	1,024	707
40 to 45.....	17	14	1,060	653	64	52	412	269
45 to 50.....	8	2	340	225	30	7	140	93
50 to 55.....	5	1	137	76	19	4	66	81
55 to 60.....	—	—	56	27	—	—	23	11
Over 60.....	—	—	73	38	—	—	30	16
	2,671	2,671	94,297	94,297	10,000	10,000	10,000	10,000

The number of births in Massachusetts, in 1845, was 15,564; being 7,793 males, and 7,594 females.

In 1844 there was 1 twin birth to 123 births.
 " 1845 " 1 " to 129 "
 " 1844 " 1 triplet to 7,261 "
 " 1845 " 1 " to 15,444 "
 " 1844 " 1 quadruplet to 15,523 "
 " 1845 " no " "

"The births registered in England are in proportion to the population one seventh part more numerous than in France, and one seventh part less than in Prussia. To 3,525 inhabitants, 100 births are annually registered in France, 118 in England, 133 in Prussia, 136 in Austria, 151 in Russia. The small number of births in France is not accounted for by any difference in the proportion of the persons married, who are, in fact, more numerous in France than in any other country from which I have been able to procure returns. It appears that 100 French wives had 14 children, 100 Prussian wives 21 children, yearly; or,

in other terms, 717 wives bore annually 100 children in France, 152 children in Prussia. If the births are divided by the annual marriages that took place seven years before, there were 3.33 births (in wedlock) to a marriage in France—4.05 to a marriage in Prussia, and 4.34 to a marriage in Austria; 4.26 to a marriage in England, and if a correction be made for first marriages, 4.79 to every two persons married. The total annual births in England, divided by the persons married seven years before, give on an average 5.12 children to every two persons married; and as many illegitimate children are the offspring of married persons before, during, or after marriage, the number of children to every two persons married in England must be between 4.79 and 5.12, or little short of five, about three of which attain the age of marriage to replace the two parents and those who have no offspring; the surplus swelling the number of the existing inhabitants of the island, or flowing in of emigration."

TABLE OF LONGEVITY.

AGE SURVIVING.	Number surviving each specified age, calculated from the deaths.							
	In Massachusetts.				In Preston, England.			
	1842.	1843	1844.	1845.	Gentry.	Tradesmen	Operatives.	
At Birth.....	100	100.	100.	100.	100.	100.	100.	
1 year.....	88.43	88.51	83.74	82.38	90.8	79.6	68.2	
2 years.....	81.76	79.42	76.69	74.67	87.6	73.5	67.5	
5 ".....	72.64	70.71	69.46	65.28	82.4	61.8	44.6	
10 ".....	67.62	64.99	65.13	61.04	81.1	56.6	38.8	
20 ".....	60.56	58.63	58.21	53.94	76.3	51.6	31.5	
30 ".....	48.34	47.32	47.80	42.12	72.3	45.9	25.2	
40 ".....	40.40	39.01	38.78	33.73	63.4	37.5	20.4	
50 ".....	32.87	32.28	32.56	27.67	56.	28.1	15.6	
60 ".....	26.08	26.02	26.02	21.71	45.1	20.5	11.2	
70 ".....	18.35	18.29	19.09	15.26	25.4	13.3	6.1	
80 ".....	9.06	8.45	9.22	6.86	8.	4.5	2.1	
90 ".....	2.03	1.64	1.83	1.35	1.3	.8	.9	
100 ".....	.07	.08	.05	.07	—	—	—	

It appears from this table, that in Massachusetts 60.56 per cent. in 1842 survived the age of 20, and only 53.98 in 1845; while in Preston 76.3 per cent. of the "gentry," 51.6 per cent. of the "tradesmen," and only 31.5 per cent. of the "operatives," survived the same age. In Massachusetts, 26.08 in 1842, and only 21.71 in 1845, survived the age of

60, while in Preston 45.1 per cent. of the gentry, 20.5 per cent. of the tradesmen, and only 11.2 per cent. of the laborers survived that age. This shows that the people of Massachusetts do not enjoy so good health as the better classes in England, though better health than the laboring classes. The influence of circumstances and occupation on health and longevity, is strikingly illustrated by the statement concerning Preston. It appears that while 72.3 per cent. of the gentry survived 80 years, only 25.2 of the operatives, or laborers, survived the same age.

The following extracts are curious and interesting. They furnish the most powerful reasons for the preservation of life statistics, and the study of this important branch of knowledge:

"Man comes into existence a helpless being; arrives at maturity by the aid of others; exists in a state of maturity an indefinite period, and then decays and dies; 'the dust returns to the earth as it was.' This is the common lot of all. Life may extend to 70, 80, 90, or even 100 years: and it may terminate in a year, a month, or even in an hour. We know that we all must die; but the time of our death we do not know. It may come comparatively soon; it may not. We believe, however, that the time of our death, though unknown, is in some respects within our own control. We believe that disease and death come not from a mysterious, unconditional Providence, but are the result of the condition of our bodies, and the influences that are brought to bear upon them. Many of these influences we bring around us by our own voluntary choice. One person takes proper food, at proper times and in proper quantities; another indulges his appetite, and takes unwholesome food, at irregular intervals, and in injurious quantities. One person clothes himself so as to maintain a uniform temperature of the body at all times; another guards not against the changes in the temperature of the seasons, but allows himself to be alternately heated and chilled. One man selects a place of residence where the air he breathes is pure and invigorating; another, where the noxious impurities of the air carry disease and death to his vitals. One person keeps his skin in a healthy state by frequent bathing; another permits it to be coated over with impurities. One chooses an occupation which gives sufficient exercise, physical and mental, to keep all the energies of his body vigorous; another, one that requires too much labor for his phy-

sical nature, or has in itself unhealthy influences, or in his occupation over-exerts himself so as to impair his physical and mental capacity. One man exposes himself to the contagion of small-pox, knowing, at the same time, that it is dangerous, takes the disease and dies; another vaccinates himself, and thus protects and saves his life. One man ventures upon the ocean without sufficient knowledge to manage his craft, and thus exposes himself to accidental death; another is cautious, and ventures no farther than safety permits. The act of the one in each case is favorable, and prolongs life; the act of another is unfavorable, and abridges it. And will not every one say that all these acts and influences, for good or for evil, are more or less within the control of man—that life may be saved and prolonged, and that the time of our death may, in some sense, be postponed? Numerous illustrations of this truth present themselves within the circle of our own knowledge. The late Rev. Dr. Ripley, of Concord, when settled, in 1778, had a feeble constitution; and one man voted against him because he thought it useless to settle a man whose probabilities of living were so small. He, however, by great care and attention to his health, acquired a pretty good constitution, and survived his 90th year. He probably added 50 years to a life, which another man, under similar circumstances, would not have enjoyed.

"The tendency of our people is to become a manufacturing people; and manufactures have been so far investigated, that the cost of every article—material, transportation, labor, wages, board, &c.—is clearly known. But what amount of life is sacrificed thereby we know not. We do not know, though we ought to know, whether there exists or whether there is any tendency to such a condition in any of our cities and towns, as would justify the remark of Mr. Chadwick, before quoted, making them 'characteristic of those crowded, filthy, badly-administered districts in England, where the average duration of life is short, the proportion of the young very great, and the adult generation transient.'

"The average age at death, as has been already said, is not to be taken as an exact index of comparison for the health of a place, unless we have the number, age, and condition of the living. It is, however, an interesting fact to be known, and we present, in the subjoined table, several calculations made from such data as are in our possession:

Period of Observation.	Number of Years.	Place and Circumstances	Number of Deaths.	Average Age at Death.
1779 to 1843.....	63.....	Concord.....	1,600.....	38.08
1812 to 1843.....	33.....	Plympton.....	404.....	41.00
1806 to 1836.....	31.....	Amherst, N. H.....	815.....	32.00
1817 to 1843.....	27.....	Dorchester, Mass.....	1,787.....	29.99
1843.....	1.....	Massachusetts Returns.....	6,988.....	34.77
1843.....	1.....	" " " ".....	7,798.....	33.82
1844.....	1.....	" " " ".....	7,680.....	33.74
1845.....	1.....	" " " ".....	8,898.....	30.26
1811 to 1830.....	19.....	City of Boston.....	8,090.....	37.93
1821 to 1830.....	10.....	" " " ".....	10,731.....	25.88
1831 to 1840.....	10.....	" " " ".....	16,514.....	39.72
1841.....	1.....	England.....	335,108.....	39.46
1841.....	1.....	Ireland.....	—.....	38.00
1841.....	1.....	London.....	—.....	37.00
1841.....	1.....	Liverpool.....	—.....	20.00
1814 to 1833.....	20.....	Geneva, Switzerland, males.....	5,219.....	38.44
1814 to 1833.....	20.....	" " " " females.....	5,888.....	42.68
1814 to 1833.....	20.....	" " " " both.....	10,907.....	40.67

"This statement affords another striking illustration of the influence of locality on longevity. Estimating, by the above average age at death, the value of life to be 100 per cent. enjoyed by the people of Plympton, then the people of Boston would, according to the age 1831-1840, enjoy but 58.41 per cent.; or, in another view, the people of Boston, on the average, live a less number of years by 44.59 per cent. than do the people of Plympton!

"But while we have all these surveys and maps pointing out the boundaries of our counties and towns, the localities of our mineral wealth, the best lands for farming and the production of domestic animals, and the existence of noxious and innoxious wild animals, we may ask where is the sanitary map which points out the healthy and unhealthy localities of the state, which will reveal to our people where and how human life can best be sustained and longest continued, and where and how human energy and productive power can be best brought to bear upon the culture and development of the sources of wealth in the state? Have we not said by such legislation that our cattle and our hogs are of more value than the lives of ourselves and our children? Have we not extended to the brute, whose worth is measured by dollars and cents, a species of legislation which has been withheld from man, who is of immeasurable value? When compared to investigations into the physical condition of man, all other investigations dwindle into insignificance.

"The population of Massachusetts may now be estimated at 800,000. From the returns of deaths received, I have estimated the whole number of deaths in the state last year to have been 14,000, which is nearly 1 in 57, or 1.75 per cent. of the population. Of these 14,000, there died at least 6,000 children and youth under 15 years of age. Estimating the average ages of the whole of these in the same proportion as those actually known, it will give for each about 4 years, or 24,000 years of life for all. This, at \$50 a year, amounts to \$1,200,000 as the cost of their maintenance. And all this sum was

lost to the state last year by premature deaths, before any return could be made for it. Can any one doubt that half, at least, might have been saved by proper knowledge and care?

"The proportionate number of deaths among the young has been increasing for several years past in this country, as our investigations prove; and we see no reason to believe it will be less, until more knowledge is diffused in regard to the laws of life and the liability to death, under different circumstances. This immense loss of the productive power of the state may be considered as an annual tax, which the people must pay every year, until they find out and use the means of prevention.

"It has been said that the strength and dignity of a nation consist not in its lands, its houses, its wealth, but in its people. And I have already stated, that that people is most prosperous which contains the greatest proportionate number of the productive age. In the above calculation we have not taken into account the loss sustained by the death of those belonging to this age. This would greatly swell the amount of loss. We have stated that, by care and attention, the late Dr. Ripley probably added fifty years to his life. We are now considering time as money, labor as money, *life as money*, and not the real, moral value of that good man's services. Estimating, then, this time to be worth \$1 per day, or \$300 per annum, the fifty years of life were worth \$15,000, and that sum was saved by the prolongation of his life. The deaths in this state last year, as we have estimated, were 14,000. Of these, 5,000 probably died between 15 and 60 years of age. Let us suppose, that by proper knowledge of the laws of health, and a proper care in obeying these laws, five years might, on the average, have been added to each of their lives—and this seems not an extravagant supposition—then we should have saved, instead of losing, as we have done, 25,000 years of life, which, estimated to be worth, in this adult age, only \$150 a year, would have produced \$3,750,000! And this loss must be annual!

"There is still another view of this great subject. William Farr, Esq., one of the ablest writers on Vital Statistics of the age, stated in McCulloch's Statistical Account of the British Empire, that 'when one person in a hundred dies annually, two are constantly sick; although this exact relation is, perhaps, not preserved in infancy and old age, or where the rate of mortality deviates from the standard, it may be safely assumed as a near approximation to the truth.' This principle may be more simply expressed thus: the proportion of persons constantly sick in a population, is double the annual proportion per cent. which the deaths bear to the living in that population. According to the estimate already given, the proportion of deaths to the population in Massachusetts was one in fifty-seven, or 1.75 per cent. Double this percentage, and we have 3.5 as the proportion per cent.; and this proportion of 800,000 is 28,000, the actual number constantly sick in this state.

"Sickness occasions a twofold loss; one for the time and labor of the sick, and the other for the nursing, medical attendance, medicine, and other expenses, which they require. The first may be estimated at \$50, and the second at \$150, or \$200 per annum for both, which, multiplied by 28,000, gives a total annual loss by sickness of \$5,600,000! It is supposed that half of this sickness is preventable, and that half of this enormous sum might be saved if the laws of health were properly understood and obeyed.

"We might save then—

By diminishing the mortality of infancy and childhood.....	\$600,000
By prolonging the lives of adults.....	3,750,000
By preserving the general health and diminishing sickness.....	2,800,000

Making, according to this view, an
annual total saving of.....\$7,150,000

"This amounts in ten years to \$71,500,000, or about *one quarter of all the property of the Commonwealth*, according to the valuation of 1840!"

6. The Banking System of Massachusetts is on the most enlarged scale. It would seem as if the people of that Commonwealth had the most unlimited confidence in this species of investment. The Legislature requires an annual statement of the condition of all these banks, and we have before us several of these annual publications. The number of Savings Institutions in 1846 was thirty-eight; their condition, &c., were as follows:*

The number of depositors in all thirty-eight banks was.....	62,893
Amount deposited in all thirty-eight banks.....	\$10,680,933 10
Public Funds.....	1,890,525 93
Loans on Public Funds.....	19,500 00
Bank Stock.....	1,900,630 73
Loans on Bank Stock.....	149,256 50
Deposits in Banks bearing interest.....	94,520 61
Railroad Stock.....	14,800 00
Loans on Railroad Stock....	232,538 75
Invested in Real Estate.....	90,854 22
Loans on Mortgage of Real Estate.....	3,757,262 80
Loans to County or Town....	818,041 96
Loans on Personal Security..	1,930,072 83
Cash on hand.....	150,728 26
Rate and amount of ordinary dividend for last year, 4½ per cent.....	345,443 10
Average annual per cent of dividends of last five years, 5½ per cent.	
Annual expenses of Institutions.....	29,806 69

7. *Insurance Returns*.—We have three of these annual publications.

8. The *Agricultural Reports* we have already particularly referred to in previous pages of this number. We have several of them, which embrace a variety of the most interesting information.

9. We might properly conclude with the *Manufactures of Massachusetts*. None of the Reports are complete enough in this particular. It would be a source of great satisfaction to know the annual average profits now and hitherto in that species of industry throughout the state. We should learn the uses or abuses of the protective system, and determine how far it is necessary among us. We had the satisfaction of visiting Lowell a short time since, the most important manufacturing town in New-England, and which consumes about one sixth of all the cotton manufactured in this country. The history of this remarkable city, prepared by Mr. Miles, is worthy of study. It has grown in an amazing ratio. Scarcely more than twenty years have passed since the manufacturing system was opened there on a scale of any promise. We know its present stature. Mr. Miles states the semi annual dividends of the companies to be frequently ten per cent for six months, or thus doubling the capital in five years! It may be gathered from this what a mint of wealth exists here, and the fortunes of Massachusetts manufacturers. Hence the secret of Boston's greatness.

* We are indebted for this summary to a handsome volume, the Massachusetts State Record, 1847, compiled by Naham Osgen, Esq., who kindly furnished

us a copy. It is made from the returns to the Secretary of State.

STATISTICS OF LOWELL.

Corporations.	Incorporated.	Capital Stock.	Spindles.	Looms.	Fem. empl.	Males empl.	Kind of Goods made.
Merrimack Manufco. Co..	1822	\$2,000,000	41,600	1,308	1,775	600	Prints & Sheetings Nos. 22 to 40
Hamilton Manufco. Co. ..	1825	1,200,000	95,956	736	750	270	Prints, Flannels, & Sheet. 14 to 40
Appleton Company.	1828	600,000	11,776	400	340	65	Sheetings & Shirtings, No. 14.
Lowell Manufco. Co.	1826	606,080	3,400 Wool 7,142 Cot.	244 Cotton. 50 Power Carpet. 30 Hand Carpet.	580	285	Carpets, Rugs, & Cotton Cloths.
Middlesex Manufco. Co..	1830	750,000	13,000	45 Broadcloth. 375 Cassimere.	950	450	Broadcloth and Cassimere.
Suffolk Manufco. Co.	1830	600,000	18,936	404	400	90	Drillings, 14.
Tremont Mills.	1830	600,000	12,960	479	400	100	Sheetings, No. 14. Shirtings, No. 14.
Lagrence Manufco. Co..	1830	1,500,000	44,032	1,260	1,200	200	Printing Cloths. Sheetings & Shirtings, 14 to 30.
Lowell Bleachery.	1832	140,000	—	—	90	230	1,700,000 lbs. bleached per an.
Boott Cotton Mills.	1835	1,200,000	34,374	906	670	180	Drillings, No. 14. Shirtings, No. 40. Printing Cloth, 40
Massachus. Cotton Mills.	1839	1,200,000	22,152	919	750	100	Sheeting, No. 12. Shirting, No. 14. Drillings, No. 14.
Prescott Manufco. Co.	1844	600,000	16,128	548	450	90	Sheetings & Shirtings, 12½ & 14.
Lowell Machine Shop.	1845	500,000	—	—	—	600	3,000 tons wrt & cast iron per an.
Total. ....	....	11,490,000	253,416	7,756	7,915	3,840	

Average wages of females, clear of board, per week.	\$2 00
“ “ males, “ per day	80
Medium produce of a loom, No. 14 yarn, yards per day	45
“ “ “ No. 30 “ “	23
Average per spindle, yards per day	1½

"The Lowell Machine-shop, included among the above mills, can furnish machinery complete for a mill of 6,000 spindles in three months, and a mill can be built in the same time.

"An important undertaking, eventually to redound to the interest and wealth of the city, is the building of the new canal. It is destined to give to most of the mills on the lower level a more regular supply of water, and consequently benefit those on the upper level. It is to be of an average width of 100 feet, and a depth of 15 feet. It will require, in its construction, a rock excavation of 150,000 yards, an earth excavation of 110,000 yards, and a mass of masonry of 50,000 yards; the whole estimated at an expense of \$500,000.

"In the course of a few months two new cotton mills will be in operation. The one, built by the Merrimack Company, to contain

28,424 spindles, and 640 looms. The other, built by the Hamilton Company, will commence with 10,368 spindles, and 260 looms, but is of sufficient capacity to contain nearly 20,000 spindles, and 400 looms. The driving power for the latter will be a steam engine, of 160 horse power, which is being put in.

"Other manufactures are produced in the city than those specified above, of a value of \$800,000, employing a capital of \$810,750, and about 1,000 hands."

Total manufacturing capital of Lowell, \$11,490,000. Total females employed, 7,915; total males, 3,840. Consumption in factories, about 50,000 tons of coal, 5,000 cords of wood, 100,000 gallons of oil, 1,000,000 pounds of starch, 785 barrels of flour. Population of Lowell, 1828, 3,532; 1846, 28,841. (See Boston.)

MOBILE—COMMERCE OF, 1850—1851.

Exports of Sawed Lumber from this Port since September 1st, 1850.

WHITHER EXPORTED.	This week.	Previously.	Total.	Last season.
Ocala	—	9104809	9104809	908471
Mexico	—	968578	968523	950294
Other ports	—	12430	18430	334718
Countrywise	230680	4199609	4430349	4739783
Total	230680	6603974	6810654	7193896

Exports of Slaves from this Port since 1st September, 1850.

WHITHER EXPORTED.	This week.	Previously.	Total.	Last year.
Cuba	—	8000	8000	—
Mexico	—	—	—	—
Other ports	797	18500	18500	279019
Coastwise	36540	210418	240963	405094
Total	37307	228918	260079	677943

Comparative Exports of Slaves from this Port for four years, to date.

WHITHER EXPORTED.	1850-51.	1849-50.	1848-49.	1847-48.
Cuba	8000	—	24500	21000
Mexico	—	—	—	—
Other ports	175225	279019	87070	228240
Coastwise	946933	406994	141820	212960
Total	260079	677943	253390	562200

Comparative Exports of Sawed Lumber from this Port for five years, to date.

WHITHER EXPORTED.	'50-'51.	'49-'50.	'48-'49.	'47-'48.	'46-'47.
Cuba	2104862	1908471	333290	1373548	329173
Mexico	288593	260094	264180	2004394	878479
Other ports	19420	334718	190308	414028	216636
Coastwise	4430240	4739783	4409286	4737223	4308646
Total	6610064	7298896	7639086	5734124	2507288

Exports of Timber, &c., from this Port since September 1st, 1850, to date.

ARTICLES.	Great Britain.	France.	Other ports.	Coastwise.	Total.
Timber, pieces	100	1473	203	—	1876
Spars	—	414	130	—	544
Masts	—	9	50	—	61
D'k Plank, feet	—	7500	86317	—	95877
Cum	—	1801	—	—	1801
Shingles	—	—	22000	203000	225000
Cedar, Logs	—	—	—	1315	1315
Laths	—	—	6000	—	6000

Statement of the Value of Imports and Duties at this Port for the third and fourth quarters of 1850, and the first and second quarters of 1851.

THIRD QUARTER, 1850.

Value of imports, dutiable	\$7,840
Value of imports, free	85,456

Total imports	\$43,096
Amount of duties collected, \$4,249 90.	

FOURTH QUARTER, 1850.

Value of imports, dutiable	76,069
Value of imports, free	84,360

Total imports	\$160,429
Amount of duties collected, \$25,043 20	

FIRST QUARTER, 1851.

Value of imports, dutiable	101,632
Value of imports, free	23,223

Total imports	\$124,255
Amount of duties collected, \$33,566 44.	

SECOND QUARTER, 1851.

Value of imports, dutiable	105,024
Value of imports, free	7,600

Total imports	\$112,624
Amount of duties col'd, \$33,417 40.	

Total amount of imports

Total amount of duties collected for the past year

Comparative Exports of Cotton from Port of Mobile, from September 1st to date, in the following years:

	Great Britain.	France.	Other Foreign Ports.	U. States.
1851	250118	46005	26373	96029
1850	162189	39973	11927	111452
1849	290836	63290	44525	140993
1848	228329	61812	29070	120850
1847	181156	39298	19784	116674
1846	208047	66821	26824	115164
1845	269037	68789	52811	130701
1844	204242	49611	15885	195714
1843	285029	53645	26903	113768

Comparative Receipts, Exports, and Stocks of Cotton at the Port of Mobile, from 1st September to date, in the following years:

	Receipts.	Exports.	Stocks.
1851	433646	418525	27797
1850	382796	325541	12962
1849	517846	539642	5046
1848	488324	439561	23584
1847	323266	306907	24172
1846	421669	416856	7813
1845	517550	521338	488
1844	468717	465452	3920
1843	479744	479345	790

COTTON TRADE.

Comparative View of the Foreign Exports, Receipts, and Stocks of Cotton of the United States, at the latest dates, for the last Four Years :

YEARS.	1891.	1890.	1889.	1888.
To Great Britain.....	1413733	1065936	1537331	1311274
France.....	295206	283297	267971	276949
Other Foreign Ports.....	268900	189939	320163	264145
Total bales.....	1977838	1558661	2230645	1849259
Receipts.....	2320120	2071108	2706038	2317811
Stocks.....	96329	143633	114239	134352

MOBILE—TOPOGRAPHY, SANATORY CONDITION AND VITAL STATISTICS OF MOBILE, ALA.—Mobile is situated on the west bank of the Mobile River, just before it empties itself into the Mobile Bay. The site is but slightly elevated above the level of the river, but sufficiently so for all purposes of convenient drainage. The soil is dry and sandy. Immediately opposite the city, on the east, is a large low island, covered with high grass and rushes, and known as the "Marsh." Immediately above the city, on the north, is a large swamp, extending along the banks of the river. Back of the city, on the north-west, west and south, the dry, sandy pine-hills commence, affording delightful and healthy retreats from the heat, sickness and annoyances of the city, during the summer; and thus have sprung up the pleasant villages of Toulminville, Spring Hill, Cottage Hill, Summer-ville and Fulton. South of the city, the shores of the bay are dotted for many miles with the residences of our citizens. These spots have been found usually exempt from the visitations of epidemic disease.

The city is not compactly built, except in the portions occupied by the commercial and business houses.

The streets generally are wide, and run mostly north and south, east and west. Much attention, of late years, has been paid to planting shade trees along the pavements, and the comfort, and probably the health of the city is much improved thereby.

The prevailing winds, during the winter months, are the north and north-east. From the middle of April, (at which time the warm spring weather commences,) the south winds, cool, refreshing, and laden with the moisture of the extensive waters of the gulf and bay, make the heat quite endurable.

No system of under-ground drainage has ever been attempted in Mobile. From the light and porous character of the soil, however, the streets soon dry after the heaviest fall of rain.

The city is supplied with good spring water through the City Water Works, from a stream some few miles distant. The climate of Mobile is warm and relaxing to the energies,

and during even the winter months is trying to the constitution from the many and sudden changes that occur. The spring and fall are delightful seasons. During the coldest weather in winter the ground is but seldom frozen.

Most rain, I think, falls in December and January, and June and July.

There are in Mobile two hospitals, large, commodious, and well-ventilated buildings, situated in the western part of the city,—the United States Marine Hospital, and the City Hospital. They are each capable of accommodating between two and three hundred patients. Their location is an admirable one, being situated on a dry, elevated spot, with but little near them to obstruct the breezes from the bay.

There are several institutions of a charitable character in the city, among which may be mentioned the Catholic and Protestant Orphan Asylums; the Benevolent Society, which, besides other objects of charity, has charge of the destitute widows of the city; and the Samaritan Society, which does an immense deal towards alleviating the suffering and distress of the indigent poor.

The want of a lunatic asylum and a work-house is sadly felt, and the urgent necessity for such institutions is becoming more and more apparent each year.

There are three cemeteries, which, from their location, can exert but little influence upon the public health.

The sanatory condition of the city has undoubtedly improved within the last few years. For many years Mobile enjoyed the unenviable reputation of being a very unhealthy place, and the devastating epidemics of 1819, '25, '29, '37, '39, and '43, in truth, gave a coloring to this accusation. Since the last-mentioned year there has been no severe visitation from the destroyer. We may account for this, in some measure, by the fact that the wet, muddy morasses, filled with rushes and stubble cane, which, until 1843, occupied nearly the entire northern portion of the city, have been filled in, and their places are now the sites of large cotton warehouses and presses; a better system of drainage has been resorted to in the principal streets; and, lastly, more exertion has been made by the municipal officers to carry into effect the prudent suggestions of the Board of Health.

There are but very few deaths that occur from any of the usual forms of endemic fever; in fact, the diseases of that character seem to have lost almost entirely the dread which a few years since they inspired. The greatest mortality for the last four or five years back, has been from enteric affections. The deaths from diarrhoea and dysentery have exceeded greatly the mortality from any other disease of an acute character. These diseases have

not been confined so entirely as formerly to the spring and summer months, but have occurred throughout the year, and, at all seasons, have been occasionally of a very unmanageable character. The following table will show the entire number of deaths in Mobile for the years 1845 to 1850, inclusive:

Years	Population.	Whites.	Blacks.	Deaths.
1845	12,000	320	122	442
1846	12,000	339	144	483
1847	13,000	433	175	608
1848	15,000	566	239	805
1849	17,000	638	273	910
1850	20,000	437	178	611

During this period the yellow fever prevailed but one season, the summer and autumn of 1847, and there were seventy-six deaths from the disease that year. In 1848 and 1849, the cholera and its kindred affections swelled the mortality somewhat. The scarlet fever, during the winter of 1848 and 1849, and the spring of 1849, prevailed to a great extent, and numbered among its victims many adults. The mortality from this disease in 1848 was seventy-five; in 1849 the mortality from the same cause was fifty. These remarks will explain the large apparent increase in the mortality in 1848 and 1849. In 1850 there was no epidemic of a fatal character. The dengue fever prevailed to a very great extent during September and October of this year, but there was no fatality attending it.

In 1845, with a population of 12,000, and a mortality of 442, the deaths were 36 5-6 in every thousand living; in 1850, with a population of 20,000, and a mortality of 611, the deaths were 30 1/2 in every thousand living. These two years were both considered healthy years. There was no epidemic visitation either year of a fatal character: we may, therefore, infer from these facts, that the

sanatory condition of the city has improved during this time.

The average annual mortality of

London, population, 2,000,000,	is 44,700
Paris, " 1,000,000,	is 28,500
New-York, " 440,000,	is 23,400
Philada., " 400,000,	is 14,000
N. Orleans, " 125,000,	is 7,954
Mobile, " 20,000,	is 611

These figures would give a mortality for

London, of one in every 44 living.

Paris, " 42 "
New-York, " 19 "
Philadelphia, " 27 "
New-Orleans, " 15 "
Mobile, " 32 "

Thus showing that the percentage of deaths is actually less in Mobile than in any of the named American cities.

The annexed table will show the number of each class—whites and blacks, males and females—who have died in Mobile from 1845 to 1850, inclusive:

	1845.	1846.	1847.	1848.	1849.	1850.	Total.
Males...	279	324	396	536	580	396	2511
Females...	163	169	212	267	329	220	1850
Whites...	320	339	443	566	637	433	2728
Blacks...	122	144	175	239	273	173	1181
Total...	442	483	608	805	910	611	3859

One is struck immediately with the great disproportion exhibited by this table, between the mortality of the males and females. Very nearly the same disproportion probably exists in the relative population, and the greater degree of exposure and the various excesses committed by the males, will probably account for much of the excess.

MOBILE—STATISTICAL HISTORY OF.

MADE UP FROM OFFICIAL SOURCES, BY WM. D. HOLLEY, F. G. KIMBALL, AND J. H. HUNT, CITY ASSESSORS.

Years	No of Poles	Value of Horses	Value of Carriages	Special Tax	No of Slaves	Value of Slaves.	Value of Merchandise.	Value of Real Estate	Total Valuation.
1814	76	.....	.....	.....	96	41,750	111,200	198,000	350,950
1815	94	.....	.....	.....	111	43,100	101,000	292,500	366,600
1816	93	.....	.....	.....	123	46,200	157,300	319,400	524,900
1817	101	.....	.....	.....	136	56,900	185,600	371,000	613,500
1818	97	.....	.....	.....	158	67,800	203,000	398,000	668,180
1819	104	.....	.....	.....	169	71,410	276,100	417,000	764,510
1820	86	.....	.....	.....	174	73,300	208,000	403,300	874,600
1821	211	.....	.....	.....	161	58,300	383,300	403,200	846,300
1822	287	.....	.....	.....	191	85 3-0	231,300	419,550	736,150
1823	333	.....	.....	.....	267	119,300	308,050	969,350	1,477,600
1824	512	.....	.....	.....	358	168,875	168,800	832,125	1,107,500
1825	334	.....	.....	.....	640	218,680	397,508	1,619,765	2,136,140
1826	407	.....	.....	.....	706	231,400	535,980	1,535,640	2,292,658
1827	471	.....	.....	.....	717	215,750	411,958	1,408,327	2,036,033
1828	527	.....	.....	.....	733	232,240	559,673	1,463,168	2,175,087
1829	402	.....	.....	.....	1,095	293,700	500,693	1,891,760	2,719,148
1830	531	.....	.....	.....	1,041	311,565	421,750	2,128,770	2,869,070
1831	419	.....	.....	.....	887	274,185	540,449	1,294,810	2,109,444
1832	764	.....	.....	.....	1,536	530,156	976,022	2,683,110	4,118,283

Years	No of Folts	Value of Horses	Value of Carriages	Special Tax	No of Slaves	Value of Slaves	Value of Merchandise	Value of Real Estate	Total Valuation
1833	898	.....	.....	.....	1,858	694,805	1,043,400	3,377,649	5,014,564
1834	980	.....	.....	.....	2,568	1,000,350	1,143,725	4,611,950	6,756,025
1835	788	.....	.....	.....	2,411	1,447,000	1,524,160	6,414,425	9,083,135
1836	617	.....	.....	.....	3,441	1,871,180	2,730,060	18,050,060	22,660,230
1837	836	.....	.....	.....	3,459	2,791,300	2,975,950	27,482,961	33,082,191
1838	1,487	.....	.....	.....	8,990	1,461,200	2,253,285	20,407,485	24,121,920
1839	1,725	.....	.....	.....	2,135	1,225,060	3,156,380	21,099,916	24,491,316
1840	1,483	.....	.....	.....	2,007	1,078,090	1,890,770	13,441,783	16,398,623
1841	1,372	.....	.....	.....	2,467	1,568,900	2,397,600	17,601,950	21,468,450
1842	1,615	.....	.....	.....	3,556	1,667,375	2,477,820	16,138,643	20,283,638
1843	855	.....	.....	.....	3,552	1,471,750	1,676,550	14,778,470	17,921,770
1844	452	.....	.....	.....	3,968	1,705,848	2,329,976	14,053,056	18,098,877
1845	943	.....	.....	10,000	3,807	1,428,690	2,442,615	12,662,085	16,503,325
1846	No poll tax	28,770	42,450	12,600	4,586	1,697,650	2,191,820	12,534,650	16,745,345
1847	Do.	15,925	27,500	10,748	3,808	1,328,490	1,760,745	8,028,240	11,776,730
1848	1,917	16,980	24,680	9,890	4,169	1,544,350	1,891,756	8,943,810	12,431,560
1849	1,607	6,185	7,840	9,570	3,888	1,600,850	1,798,350	9,300,930	12,629,700
1850	1,400	7,135	8,685	5,725	2,313	1,343,850	2,041,380	8,577,025	11,966,790
1851	1,554	87,100	64,740	9,285	6,208	2,493,845	2,886,565	11,698,045	17,670,295

MOLASSES TRADE OF UNITED STATES, 1851.

RECEIPTS OF FOREIGN IN UNITED STATES.

	Hds.	Tcs.	Bbls.
Total receipts, from January 1 to December 31, 1851.....	287,688	18,620	25,308
Add stock at all the ports, January 1, 1851.....	12,800	310	250
Total supply.....	270,488	18,330	25,518
Deduct exports in 1851.....	2,305	408	220
Deduct stock, 1st January, 1852.....	268,183	18,523	25,279
Total consumption of foreign in 1851.....	11,200	837	252
—Or, about.....	256,983	18,195	25,097
Add crop of Louisiana, Texas, Florida, &c., of 1850-51, (the most of which came to market in 1851, and assuming the stock of this description, 1st January of each year, to be equal).....	32,238	278	gallons.
Would make the whole consumption in 1851.....	43,948	018	gallons.
Consumption of foreign in 1850.....	24,866	949	"
Add crop of Louisiana, Texas, Florida, &c., 1849-50.....	12,912	300	"
Would make the whole consumption in 1850.....	37,019	249	"
Whole excess in 1851.....	6,928	779	"
Excess of foreign in 1851.....	8,431	329	"

It will be seen by the above statement, that the increase in the consumption of foreign in the country, in 1851, is equal to about 84 per cent. over the consumption of 1850. It will be remembered, however, that the crop of Louisiana, Texas, &c., in 1850-51, was 1,502,560 gallons short of the production of the previous season, which induced larger importations the past year; even New-Orleans having taken equal to 1,227,485 gallons of Cuba to supply the deficiency. The crop of Louisiana, &c., the present season, is estimated to be a full average one.

MEMPHIS, TENN.—Every day gives me additional evidence of the increasing prosperity of this already prosperous city; and although her commerce is great, yet upon that alone her public-spirited citizens do not intend to rely, for the notes of preparation are already heard in various quarters, and in addition to her commerce, manufacturing will soon claim a part in adding to her wealth. Preparations are now making for the establishment of a very large boat-

yard, to be conducted on a scale as extensive as any in the west; and ere long, although we cannot afford the facilities at Nashville, Tennesseans will have the opportunity of supporting in Tennessee this important branch of industry. The gentleman who opens the yard is said to be one of the best boat-builders in the Union. As an evidence of its truth, some of the finest boats running on the Mississippi are his handiwork; among others, the magnificent Autocrat. In addition to this, an extensive flour mill, now nearly completed, is about to commence operations, and will make, it is said, sixty-two thousand barrels of flour annually; creating another large source of wealth to the community. These things speak most favorably for the public spirit of Memphis, and indeed I find on all sides evidence that her citizens are determined, by the liberal views they take of things, to make Memphis one of the first cities in the West—and the city already feels the beneficial result of these views. In 1840, I am told, Memphis had a population of from three to four thousand;

the census recently taken shows a population of twelve thousand; and although no prophet, I venture the prediction that 1860 will show a population more than double this number.

Since writing the above, I learn that a large cotton manufactory has just been erected here, and will go into operation very shortly, giving employment to a large number of operatives. Why cannot we chronicle such an event in Nashville! Urge our citizens to wake up to the importance of these things, for if they sleep much longer, every city in this country will outstrip us, and upon ourselves must rest the fault.

MEMPHIS CONVENTION OF 1845.—

We give the resolutions adopted, for useful reference:

1st.—*Resolved*, That the reports of the various committees, presented to the convention, be printed, together with such documents accompanying them, as the committee appointed to supervise the printing of the proceedings of the convention shall deem necessary.

2d.—*Resolved*, That safe communication between the Gulf of Mexico and the interior, afforded by the navigation of the Mississippi and Ohio rivers and their principal tributaries, is indispensable to the defense of the country in time of war, and essential also to its commerce.

3d.—*Resolved*, That the improvement and preservation of the navigation of those great rivers, are objects as strictly national as any other preparation for the defense of the country, and that such improvements are deemed by this convention impracticable by the states, or individual enterprise, and call for the appropriation of money for the same by the General Government.

4th.—*Resolved*, That the deepening of the mouth of the Mississippi, so as to pass ships of the largest class, cost what it may, is a work worthy of the nation, and would greatly promote the general prosperity.

5th.—*Resolved*, That if the policy of reinforcing our Navy with war steamers be adopted, the western waters are proper sources of supply, as they abound in iron, the best material for their construction, and in lead and copper, important materials for munitions of war; provisions also being cheap, and the skill requisite for their construction and navigation being ample in this region, which already possesses the largest steam commercial marine in the world.

6th.—*Resolved*, That the project of connecting the Mississippi river with the Lakes of the North, by a ship canal, and thus with the Atlantic Ocean, is a measure worthy of the enlightened consideration of Congress.

7th.—*Resolved*, That the intercourse between the Gulf of Mexico and the Atlantic

coast ought to be preserved unimpaired, and that ample military and naval defenses, and additional light-houses and beacons, should be established along the coast of the Gulf of Mexico, and at the most eligible points.

8th.—*Resolved*, That the Gulf and Lake coasts are greater in extent than the Atlantic seaboard; that the interests to be defended in one quarter are quite as important, and altogether as national, as those in the other; and that the expenditures required for the proper defenses of the Gulf and Lakes, will fall far short of what has been freely voted for the coast defenses of the Atlantic.

9th.—*Resolved*, That Congress should establish a National Army and Foundry at some point on the western waters, at as early a period as practicable.

10th.—*Resolved*, That the Marine Hospitals on the western and southern waters, the construction of which has been commenced or authorized by Congress, ought to be prosecuted to completion with the least practicable delay.

11th.—*Resolved*, That the Mail service of the West and South requires great improvement in speed and regularity, particularly on the western rivers, and that measures ought to be taken for the prompt extension, by Government, of the Magnetic Telegraph, into or through the Valley of the Mississippi.

12th.—*Resolved*, That millions of acres of the public domain, lying on the Mississippi river and its tributaries, now worthless for purposes of cultivation, might be reclaimed by throwing up embankments, so as to prevent overflow; and that this convention recommend such measures as may be deemed expedient to accomplish that object, by grant of said lands, or an appropriation of money.

13th.—*Resolved*, That Railroads and communications from the Valley of the Mississippi to the South Atlantic ports, in giving greater facilities to trade, greater dispatch in travelling, and in developing new sources of wealth, are, in all their salutary influences on the commercial, social, and political relations, strongly urged upon the consideration and patriotism of the people of the West; and they are the more recommended as works within the power of private enterprise to construct, and as affording profitable investment of capital.

14th.—*Resolved*, That in order that the earliest opportunity may be afforded for private individuals and enterprise to direct their capital and energies to the completion of the important roads projected, the convention recommend to the delegations present to appoint committees charged with the duty of prompt and early applications to their respective Legislatures, for charters to

construct such roads as may pass through their states; and to ask such aid and patronage from said states as they, in their discretion, may deem proper and necessary, to aid in the construction of the works.

15th.—*Resolved*, That as many of the roads projected may pass through the public domain, this convention would respectfully urge upon the consideration of Congress, the equity of granting the right of way and alternate sections, in aid of the works so situated—such grant, in the opinion of this convention, being no more than a fair compensation paid by the proprietor for the enhanced value imparted to the sections of land retained by Government.

16th.—*Resolved*, That efficient steps should be taken by the General Government to move and prevent the recurrence of the obstacles in the Mississippi, opposite the city of St. Louis, so that the harbor there may at all times be accessible, as objects of public utility, and of a national character, and entirely beyond the ability of Missouri to accomplish.

17th.—*Resolved*, That it is expedient that Congress should make an appropriation of money, for the purpose of completing the Military Road from the west bank of the Mississippi (opposite Memphis) through the swamps, to the highlands in Arkansas, in the direction of the various military posts on the western frontier.

18th.—*Resolved*, That a Dry Dock and convenient arrangement for the repairs and refitting of Government vessels, should be established at some suitable point on the Gulf of Mexico.

19th.—*Resolved*, That the president appoint a committee of five members of this convention, to memorialize Congress on the various topics embraced in the foregoing resolutions.

20th.—*Resolved*, That the president also appoint a committee of five members of this convention, to address our common constituents on the same subjects.

MEMPHIS CONVENTION OF 1849.—*RESOLUTIONS ADOPTED*.—*Resolved*, That it is the opinion of this convention, that it is the duty of the General Government to provide, at an early period, for the construction of a national railroad from the Mississippi river to the Pacific ocean.

Resolved, That to facilitate the accomplishment of this object, in the opinion of this convention, it is the duty of the General Government to constitute an efficient and competent corps of engineers, to make complete explorations and surveys of all the routes that have been designated by public opinion, as proper for the line of this road.

Resolved, That after the proper surveys shall have been completed, that, in the

opinion of this convention, it is the duty of the General Government to locate the line of the road; and, in making the location, that route should be selected which is easiest of access, best calculated to subserve the purposes of national defense, most convenient to the people of, and (as far as practicable) central to, the United States, and upon which a railroad can be constructed on the cheapest and best terms.

Resolved, That, to carry into effect the object of the first resolution, in the opinion of this convention, the public lands of the United States constitute a legitimate and proper fund.

Resolved, That, after the construction of the national railway trunk from the Mississippi river to the Pacific ocean, in the opinion of this convention, it is the duty of Congress to aid, by the appropriation of the national domain, in the construction of such branch railroads as will best connect it with the northern lakes, and the great thoroughfares leading to the Atlantic ocean, and with such other points on the Mississippi river as will connect it with the lines of improvement completed, or in the course of construction; and also to aid in the construction of branches from the main trunk to suitable points on the Gulf of Mexico, either east or west of the Mississippi river.

Resolved, That, in the opinion of this convention, it is the duty of the General Government to provide, under liberal conditions, for a connection between the main trunk of this national railroad and all railroads now made, or which may hereafter be constructed by the authority of the several states and territories of the Union.

Resolved, That, as an important means, a necessary preliminary to the construction of a railroad, it is the first duty of Congress to take the necessary measures for the establishment of military posts from the western confines of our western states, along the southern boundaries of our republic and our Indian frontier, to the Pacific ocean; that these posts should be established in all proper places, not far distant from each other, and that civilized and productive settlements should be encouraged around them, by sales and the grant of preemption rights of the public lands to actual settlers, and by such other encouragement as may be deemed necessary, so that by these means ample opportunities may be afforded to our engineers for the immediate survey and reconnaissance of our possessions lying between our western and southern states and the Pacific ocean; and so, also, that by these means safe, practical roads, one or more, with facilities of travel, may be immediately formed for our citizens, and for the transportation of troops and munitions of war, etc., across our own territories, from the Atlantic to the Pacific shores,

and in order that our government may fulfil its recent treaty stipulations with Mexico.

Resolved, That while the contemplated railroad across the continent is being constructed, a present communication between the states of this Union and the American and Asiatic coasts of the Pacific ocean, is of vast importance to every portion of this country; that such communication can be obtained by ship-canal or railroad across the isthmus of Tehuantepec, Nicaragua, or Panama, or across them all; which railroads or canals may be constructed by private enterprise; and this convention, in order to encourage the undertaking and completion of such works, recommend the passage of a law, by the Congress of the United States, directing the Postmaster General, Secretary of War, and Secretary of the Navy, to make annual contracts for the transportation of the mails, troops, and military and naval stores of the government, from the Atlantic to the Pacific ports of the country, by the shortest, speediest, and cheapest route.

Resolved, That, in the event of the appropriation by Congress of a considerable portion of the public lands, or of the proceeds of the sales thereof, to the construction of a railroad from the Mississippi river to the Pacific ocean, that liberal appropriations of the public lands lying within the limits of the respective states, should be made to aid them in the construction of their works of internal improvement.

Resolved, That, in the present state of our knowledge, we feel warranted in recommending to the particular attention of the General Government for examination, as possessing special advantages, the route commencing at San Diego on the Pacific ocean, crossing the Colorado of the West, running along the Gila river, or near it, in a direction to the Paso del Norte, and thence across the state of Texas to its north-eastern boundary, between 32° and 33° of north latitude, terminating at some point on the Mississippi between the mouth of the Ohio river and the mouth of Red river.

Resolved, That a special committee of seven be appointed by the president of the convention, to collect and publish information, to prepare a memorial to the Congress, and an address to the people, of the United States, upon the subject of increasing the facilities of intercourse between the Atlantic and Pacific oceans, and such other matters as shall be embraced in the resolutions of this convention.

Committee of seven, appointed by the president to memorialize Congress, &c.:

J. D. B. DEBOW, of Louisiana.
 ABRAHAM FOWLER, of Arkansas.
 JAMES C. JONES, of Tennessee.
 J. R. STROTHER, of Missouri.
 J. F. G. MINTAG, of South Carolina.
 C. C. MILLS, of Texas.
 G. S. YERGER, of Mississippi.

MINNESOTA.—We make the following extract descriptive of Minnesota, from a letter written by H. H. Sibley, Esq.:

"The part of Minnesota which lies east of the Mississippi river constituted a portion of Wisconsin Territory before the admission into the Union of the state of that name, with curtailed boundaries. The St. Croix, and a line drawn from the main branch of that stream to the mouth of the St. Louis River, on Lake Superior, now divide Wisconsin and Minnesota. On the west of the Mississippi, the parallel of 43° 30' is the line of division between the state of Iowa and Minnesota west to the Missouri. All the country up the latter stream to its junction with the Whitewater, and along that river to the British Possessions, thence westwardly following the line of 49° to the intersection of the extreme north-west boundary of Wisconsin, in Lake Superior, appertains to Minnesota Territory. The area embraced between these limits contains between 140,000 and 150,000 square miles, equal in extent to New-York, Virginia and Pennsylvania combined.

"This immense region is bountifully watered by the Mississippi, St. Peter's, and Missouri rivers, and the Red River of the north, and their numerous tributary streams which traverse it in every part. There are also innumerable bodies of fresh water, which abound in fish of various kinds, the white fish especially being found in great numbers in the more northern and large lakes. The general character of Minnesota is that of high rolling prairie; but the streams and lakes are bordered with heavy bodies of timber which contain every species of wood known along the Mississippi below, except beech and sycamore. At a point about eight miles above the Falls of St. Anthony, west of the Mississippi, commences a large and remarkable forest which extends to the south, nearly at a right angle across the Minnesota or St. Peter's river, to the branches of the Makato or Blue Earth river. This vast body of woodland is more than one hundred and twenty miles in length, and from fifteen to forty in breadth. Many beautiful lakes of limpid water are found within its limits. In this beautiful country are to be found all the requisites to sustain a dense population. The soil is of great fertility and unusual depth, covered as it is with the mould of a thousand years. The Indian is here in his forest home, hitherto secure from the intrusion of the pale faces; but the advancing tide of civilization warns him that ere long he must yield up his title to this domain, and seek another, and a strange dwelling-place. It is a melancholy reflection that the large and warlike tribes of Sioux and Chippewas, who now own full nine tenths of the soil of Minnesota, must soon be subjected to the

operation of the same causes which have swept their eastern brethren from the earth, unless an entirely different line of policy is pursued by the government towards them. If they were brought under the influence and restraint of our benign laws, and some hope extended to them, that education and a course of moral training would, at some period hereafter, entitle them to be placed on an equality, socially and politically, with the whites, much good would be the result. The soil of Minnesota is admirably adapted to the cultivation of all the cereal grains. Wheat, oats, and barley afford a safe crop, even at the British Red river colony, which is in latitude 50°.

"Minnesota is destined to become a great agricultural region, and her prairies are well calculated for the raising of stock. There is also such an extent of water-power throughout its broad surface, that no reason can be perceived why manufactures would not flourish also. The reports of those scientific men who have explored the country justify us in the belief that our territory is rich in copper ores; and more particularly in galena or lead. Whether coal exists is a problem yet to be solved. If it shall be found in any considerable quantities, the discovery will be of more real advantage to Minnesota than the best mines of silver and gold.

"On the upper portion of the Mississippi and St. Croix valleys lies the great region of pine, which will continue to prove a source of wealth to the territory and state for a century to come. The manufacture of pine lumber already occupies a large part of the industrial labor of the people. Much of this is needed for home consumption, caused by the rapid increase of population; but the larger portion is sent to St. Louis, where it meets with a ready sale.

"The climate of Minnesota is not subject to sudden variations, especially in winter. Although, in some years, the snow falls to a considerable depth, yet, as a general rule, we have far less than is the case either in New-England or the northern part of the state of New-York. The comparative absence of moisture in our country is attributable, doubtless, to the fact that no very large bodies of water are to be found, although, as I have before stated, small lakes abound. During the coldest weather in winter the air is perfectly still; consequently the temperature is much more tolerable, and even pleasant, than could be supposed by those who reside in the same latitude on a stormy Atlantic coast.

"The navigation of the Mississippi is not to be relied on after the first week in December, and steamboats arrive in the spring about the 10th or 12th of April, so that the river may be considered as closed about five months in the year.

"St. Paul is the present capital of the territory. It is situated on the east bank of the Mississippi, about six miles below Fort Snelling, and eight miles by land from the Falls of St. Anthony. It is now a town of twelve or thirteen hundred inhabitants, and is rapidly augmenting in population.

"Stillwater is a thriving village on lake St. Croix, about eighteen miles from St. Paul by land, and twenty-five miles from the Mississippi. It is second only to St. Paul in size, and is increasing steadily in wealth and population. There is also quite a village at the Falls of St. Anthony, which is one of the most lovely spots in the upper country, and also at Marine Mills on the St. Croix river, Sauk Rapids, on the Mississippi, seventy-five miles above the falls, and at Mendota, at the mouth of the St. Peter's river. Point Douglass is at the junction between the Mississippi and St. Croix rivers. It is a charming place, and is destined to be the site of commercial importance.

"Pembina is the name of a settlement on our side of the line of the British Possessions, and contains upwards of a thousand souls, principally persons of a mixed Indian and white blood. These people are active and enterprising, hardy and intrepid, excellent horsemen, and well skilled in the use of fire-arms. They subsist by agriculture and the hunting of buffalo. They desire to be recognized as citizens of the United States, as do some thousands of their kindred, who now reside at Selkirk's colony in the British territory; but who are anxious to emancipate themselves from the iron rule of the Hudson Bay Company. These people are only waiting some action on the part of the government of the United States to join their brethren at Pembina. They would form an invaluable defense to that exposed frontier, either with the British government (to which they are much disaffected) or with the Indian tribes.

"I might state in the connection that the Indians generally through our territory are kindly disposed towards the whites, and anxious to avoid a collision. This is emphatically the case with the Sioux and Chipewas.

"I would remark in conclusion, that the people of our territory are distinguished for intelligence and high-toned morality. For the twelve months or more prior to the establishment by Congress of a government for Minnesota, although, in the anomalous position in which it was left by the admission of Wisconsin into the Union as a state, it was uncertain to what extent, if any, the laws could be enforced, not a crime of any magnitude was committed. The emigration to Minnesota is composed of men who go there with the well-founded assurance, that, in a land where nature has lavished her

choicest gifts, where sickness has no dwelling-place, where the dreadful cholera has not claimed a single victim, their toil will be amply rewarded, while their persons and property are fully protected by the broad shield of law. The sun shines not upon a fairer region, one more desirable as a home for the mechanic, the farmer, and the laborer, or where their industry will be more fully requited, than Minnesota Territory."

MEXICAN REPUBLIC.—The work, the title of which we have prefixed to this article,* besides being well-timed, for it has made its appearance when all men's minds are occupied with the subject, is very cleverly written, and exhibits, in an advantageous light, the industry and talent of the author. General Thompson appears to have availed himself of all the advantages of his situation, to store his mind with characteristic anecdotes of the people among whom he was living, as well as carefully to observe the tendency of the events that were passing around him; and to study with unremitting attention the conduct and character of the principal actors in the revolutionary struggles which have distracted that country for more than a quarter of a century. Although we differ with him in some particulars, and in none more than in his estimate of the character and services of some of the chiefs who have figured during this eventful period, on the whole, we congratulate ourselves and the public upon the appearance of a work on Mexico by an American and a Republican. The accounts we have lately seen have all been written by Europeans, who take part heart and mind with the monarchical party; and unhesitatingly misrepresent the motives and conduct of the federal republicans; and from ignorance of the truth, as we are disposed to believe, give a false coloring to the events they undertake to describe.

Before entering into a more minute examination of the work before us, we propose to give our readers a rapid sketch of the present condition and prospects of Mexico, and briefly to review the chief events of its history since the revolution; and of the causes which have led to its actual state of destitution and misrule. And first, it may not be useless to give some account of the extent, population, and military and other resources of the country.

Mexico is bounded on the east and south-east by the Gulf of Mexico and the Caribbean Sea; on the west by the Pacific Ocean; on the south by Guatemala; and on the north by the United States. From the southern extremity of Yucatan to the northern extremity of California, Mexico extends over twenty-seven degrees of latitude; varying considerably in breadth, being only one hundred and

twenty-five miles across at its lower extremity, and about eleven hundred miles from the Gulf to the Pacific, at its northern boundary. Baron Humboldt estimated the superficial extent of the Mexican territory to be 118 478 square leagues; of which 82,000 square leagues are situated under the temperate zone, and the remainder lie within the tropics. The whole of this immense extent of country is traversed by the great Cordillera; which, after passing through the whole of South America, in a single chain, broken only here and there by deep transverse valleys, divides into two branches on entering this northern continent, which, preserving their northerly direction, leave in the centre an elevated tract of country known as the table-land of Mexico. The height of this tract varies from six to eight thousand feet above the level of the sea, and is surmounted by several lofty peaks, which soar above the region of perpetual snow. The western branch continues of an uninterrupted height, until it splits into the various ramifications, known chiefly by the name of the Rocky Mountains; while the eastern division declines as it approaches our frontier, until about the 26th degree parallel of north latitude, it subsides to nearly a level with the ocean. In ascending from the coast to the table-land, the climate and productions, to use an expression of Humboldt, succeed each other in layers; and the traveller, in a few days, passes in review the whole scale of vegetation, from the ferns and other plants of the tropics to the pines of the arctic regions. He considers the low country as very insalubrious; but, with the exception of the towns on the coast and the borders of rivers and streams, even this portion of Mexico is singularly exempt from disease. Humboldt gives 76 deg. of Fahrenheit as the mean heat of the coast, and 64 deg. of Fahrenheit as that of the table-land. We should have estimated both as somewhat higher, especially that of the coast; but in such an extent of country, all general calculations must be subject to exceptions. In the internal provinces, for instance, the cold of winter and heats of summer are both extreme. In the equinoctial region of Mexico, and even as far north as 28 deg., the seasons of rain and drought are regular and periodical. The rains generally commence about the middle of May, and end in October; the remainder of the season being one long drought. Owing to this cause, wheat and barley can only be cultivated where the land is capable of irrigation; and in such situations they are very productive, yielding thirty for one. Maize or Indian corn is always sown before the rains set in, the farmer relying upon the moisture in the ground to bring up his crop, and upon the intercession of his patron saint or of some miraculous image to bring down the rain in due season to mature his crop. The crops of Indian corn that we have seen in the low lands near the coast, on the slope of the

* Recollections of Mexico, by the Hon. Waddy Thompson.

Cordillera, and on those favored spots of the table-land, equal, if they do not exceed, those of Tennessee and Kentucky.

As may be supposed, the face of the country thus distinguished presents a very arid appearance during the period of drought, and is entirely without forage for horses or cattle. We have seen the herdsmen feeding the latter with the succulent leaves and stems of the cacti, which they roast in the fire to deprive them of their prickles, that effectually prevent animals from feeding on them without the aid of man. Horses and mules are here fed throughout the winter on barley and chopped straw. At the proper season pasturage is abundant, and the road along this elevated platform, running north and south, so perfectly practicable, that we have ourselves seen on one occasion four wagons in the square of Mexico, driven and escorted by our sturdy countrymen from Santa Fé, in New-Mexico, through Chihuahua to the capital. They were proceeding with produce to Vera Cruz, on account of some Mexican merchants, and actually delivered their loads there, and returned to Chihuahua with dry goods. Neither the nature of the country, therefore, nor that of the roads offer any serious obstacle to the passage of armies. Provisions, however, are not abundant; for corn, wheat, and barley are cultivated only in patches as it were; chiefly in the Baxio, a rich and fertile country lying north of Mexico and south of Guanajuato, the plains of Toluca, the southern and eastern parts of the valley of Mexico, the state of Puebla, and the vicinity of Aguas Calientes. Enough, however, is raised for the wants of this very abstemious people; but a few thousand northmen, with the ordinary appetites of their race, would, in a few days, breed a famine in the most fertile and productive of these favored districts. Beans are cultivated pretty extensively, and we sent home on one occasion, to the New-York Horticultural Society, thirty-two varieties of pulses; the best is the most common, a red bean, resembling very much in form, taste and flavor, our southern red or cow pea. Our people would be much surprised to see a whole estate cultivated in red pepper, or a species of capsicum, called by the natives *chilé*. The consumption of this article is prodigious, the working classes subsisting chiefly on thin cakes, made of Indian corn, seasoned with a sauce of tomato and *chilé*. It would be foreign to our purpose to dwell upon the other productions of Mexican agriculture. They would not aid much in subsisting an army.

The population of the country has been variously estimated. In 1830, it was believed to have reached 8,666,666. It cannot be short of that number now. It is composed of a very few European Spaniards; Creoles or Spanish descendants, who are the chief proprietors of the soil, and govern the country; Indians, unmixed, descendants of hewers of

wood and drawers of water among the aboriginal races found there at the time of the conquest, the better born having perished under the oppression of their conquerors; and the mixed classes. Of this enumeration, the poor Indians are the most numerous and the most industrious. Now, in what condition is this immense population to defend the country against an invading army? The regular army of Mexico, even in the midst of peace, cannot be estimated much below 30,000, with an equal number of active militia, enrolled and partially disciplined, ready to be called into the field in any emergency. The entire militia cannot well be counted at less than 500,000 men, liable to be drafted into the service at any moment. Of these latter, 100,000 are horsemen, unsurpassed in horsemanship and in the use of the spear and lasso. It must not be supposed that, because the recruiting service is carried on forcibly, and the recruits conducted to the army like felons, they make on that account inefficient soldiers. We have seen the French conscript manacled and driven along to the *dépôt* by *gens d'armes*; we have seen the English sailor dragged, bleeding, through the mud, by the press-gang, to man some vessel of war; and yet, after a moderate course of drill, they both are animated by the *esprit de corps* of their comrades, and rival the most enthusiastic volunteers in battle. The Mexicans do not excel in the use of firearms, but frequent practice may remedy that defect. When we were in Mexico, in 1829, the army was stated by the Secretary of War to consist of 58,955 men, of whom 32,161 were actually under arms. The troops of the line were composed of twelve battalions of infantry, each of 823 men, the full war complement being 1223; twelve regiments of cavalry, each 559 men, the war complement being 815; and three brigades of artillery, of 1797 men in all. In addition to this force, stationed at and near the capital, the report represented 22,788 regulars under arms, protecting the coasts and the northern frontier. We believe this to have been an exaggerated statement; indeed, we know it to be so; but we likewise know, that the expenses of the army, at that period, exceeded nine millions of dollars a year. This extravagance has proved the fruitful source of all the evils that have befallen this ill-fated country since its separation from Spain.

The Mexican government, soon after its installation, negotiated a loan in England, which they dissipated in ostentatious and needless expenses in three years; and from that period the country has been torn by domestic faction and constantly recurring insurrections. If we were called upon to account for these disorders, we should be disposed to attribute them altogether to want of economy and financial skill. They borrow money, and lavish it as if it formed part of their annual income; they anticipate their revenue at a ruinous sacrifice,

and make no permanent provision for repaying their debt, or refunding the amount thus abstracted, at an enormous cost, from their income. The pensions, no inconsiderable items of their expenses, the salaries, the army and navy, are all unpaid, and all complain and clamor; and, at length, on some pretext or other, revolt against the government in the vain hope of being relieved. Whether the invasion of their territory will impart more wisdom to their councils and energy to their government, we know not. But if the people should take an active part in the contest, and the clergy be incited to oppose us, our forces ought to be well organized, well disciplined, and well supplied, to promise a successful result to our arms. During the struggle for independence it was remarked, that the frequent failure of the insurgents was occasioned by the necessity they were under to subsist their armies on the country they sought to liberate. Owing, in some measure, to the bad roads and absence of other means of transportation, little more is produced, in most of the districts, than the wants of the inhabitants require; and the attempt to take from them that little, would rouse them to desperate resistance. All outrages upon the church, too, must be avoided; for if the clergy are forced to regard their influence or their property to be in danger, they will exert the one to inflame the minds of the people against us, and give a portion of the other to supply the government with the means of carrying on the war, as they can very well afford to do. The great influence exercised by the priesthood over the affairs of Mexico may be inferred from the fact, that all the great revolutions that country has undergone, during the present century, have been their work. Hidalgo and his co-laborers were priests, and the successful movement that resulted in the separation of Mexico from Spain was instigated by them, in order to preserve their estates, which would have been forfeited if the decrees of the Cortes of Spain had been carried into effect in their American dependencies. They afterwards dreaded the ultimate effect of free institutions, and aided to overthrow the federal republic, and to erect upon its ruins a central government, which, if it be allowed to subsist any length of time by the Mexican people, must terminate in monarchy. We mean despotic monarchy. We are aware that many entertain the opinion that this is the only form of government suited to restrain the turbulent character of this people. We do not coincide with this opinion, but believe, that with more experience and better education, the people will gradually comprehend the workings and benefits of free government, and become tranquil. This can only happen, however, under a federal system. A central government, under whatever denomination it may exist, will be a tyranny; and if the states should separate, an event by no means

improbable, there is too much reason to fear they will be involved in continual disputes and war with each other, and become, each in its turn, subject to military despotism. From all these evils their sister republic might have saved them, not by force, but by advice and persuasion; for a very large majority of the Mexicans are inclined to look up to us as their example; and it is certain that the contemplation of our success cheered them on their rugged path to freedom. The monarchists, the aristocracy, and the clergy, became early aware of this feeling among the people, and, aided by the Europeans in Mexico, succeeded in driving from the country the first envoy sent there by our government, who, it was supposed, exercised an influence adverse to their views; and now the same parties have provoked a war with the United States, which must result in the further alienation of the two republics. We shall for ever regret that this government has permitted them to succeed in their nefarious designs. We venture to predict, however, that their triumph will be ephemeral. Let the final result of this war be what it may, let the monarchists and the military succeed in establishing a central despotism and a kingly throne in Mexico, such a government will not long subsist where the people are as deeply imbued with the spirit of liberty as the Mexicans are. They will rise in their might and shake off so disgraceful a yoke; and in our opinion the only circumstance likely to retard this event, would be the premature intervention of this government. It is not our province, nor is it our intention, to indicate the steps by which these United States might acquire sway over the republics of the new world; but we are persuaded they might, by judicious management, exercise a beneficial moral influence over their councils and conduct, equally advantageous to both parties.

So many misrepresentations have appeared in print, injurious to the character of the leaders of the republican party there, that we cannot forbear giving an account of the occurrences as they really took place. We attach no blame to the European authors who have recorded the events of the several revolutionary movements in Mexico. They received their information from men prejudiced against the party of the people, and with feelings warmly enlisted in favor of the aristocracy. Their statements furnish another striking proof of the difficulty of writing contemporaneous history.

The feeble attempts which were made to render Mexico independent of Spain, from the year 1810 to 1821, were chiefly the work of the parish priests, aided by the Indian population. Not one of the nobles, and very few of the gentry, took part with the insurgents. It is true that the revolution was ultimately effected by them; but they were actuated by

very different motives from those which had animated the people in their first efforts to shake off the yoke of the mother country. The new constitution of Spain was so liberal as to be offensive to their pride. The Europeans saw, with jealousy, that the Creoles would be intrusted with power; and the clergy with dread that the decrees of the Spanish Cortes would deprive them of their vast possessions, and reduce them to poverty. They speedily determined on a separation, and found a fitting agent to carry out their plans in Don Augustin Iturbide, who possessed great influence with the army, and had hitherto been an active, zealous, and cruel persecutor of the Mexican insurgents. The separation from Spain was declared, and the "plan of Iguala" promulgated; the principal object of this scheme was to establish a Bourbon Prince of Spain on the throne of Mexico. A vast number of the Creoles, and of the people generally, were opposed to the plan of Iguala. They were unwilling to receive a prince of Spain, or to sanction the adoption of a monarchical government. They were without organization, however, and compelled to submit to the *Bourbonistas*, as the ruling party was then styled. In this state of affairs, the new Captain-general, O'Donoju, arrived at Vera Cruz, to take command of the country under the new constitution. He soon saw the futility of resisting the march of the revolution, entered into a negotiation with Iturbide, on the basis of the plan of Iguala, and evacuated the country with the Spanish troops that had formed the garrison of Mexico. So far, the party were successful, but their intentions were frustrated by the ambition of the chief they had selected to carry them into effect. Iturbide managed to have himself proclaimed emperor by the army, dissolved the Congress, and imprisoned his former friends, the chief *Bourbonistas*. His career of extravagance and misrule was brief, and we hesitate not to predict that a similar fate awaits any one who shall have the folly to make a similar attempt. After a sharp contest between the *Bourbonistas* and the *Republicans*, the latter succeeded in establishing a federal government, very nearly resembling that of the United States. When this was resolved on, the former made an effort to elect one of their number president. The election of the people, however, elevated General Guadalupe Victoria to the presidency of the new Republic, and General Bravo became vice-president and leader of the opposition, which was promptly formed against the administration. Matters went on smoothly enough until the republican party began to gain the ascendancy in Congress, when one Montaño made a silly attempt to disturb the government at Otumba, in 1827. His declaration was only remarkable for containing a denunciation of the Minister of the

United States, and a peremptory demand that he should be expelled from Mexico. His example was followed by Colonel Rivero. Both these insurrectionary movements were put down by a proclamation, declaring them treasonable. But to the surprise of every one, a very few months after this event, General Bravo retired to Zulancingo, with a small body of discontented, from whence he issued a manifesto, declaring himself in favor of the plan of Montaño. We never shall forget the exultation of the *Bourbonistas*, the Europeans, the priests, and all those who had hitherto appeared in the character of advocates of order and moderation, when this movement became public. They already believed themselves triumphant, and ruling again in Mexico. They were destined, however, again to be disappointed. By order of government, General Guerrero marched upon Zulancingo; and Bravo, although at the head of a considerable force, surrendered without any serious opposition. He was brought to trial before the Congress of the Mexican United States, found guilty of treasonable designs, and banished the country for a period of seven years.

But the great struggle between the two contending parties that divided the nation, was made upon the election of a successor to President Victoria. Guerrero was the candidate of the republicans, and Gomez Pedraza of their opponents. The latter was Secretary of War in Victoria's cabinet. General Guerrero had distinguished himself in the wars of the revolution, as an active and brave partisan leader. He was, however, a weak man, and totally unfit for the station. Pedraza, his antagonist, on the contrary, was a man of education; he began his career in the service of Spain, under the viceroys, taking an active part against the Mexican patriots; was sent deputy to the Cortes of Spain; and, on his return, became one of Iturbide's ministers, and subsequently a leader of the *escocceces*, or *Bourbon* party, which contributed so essentially to the overthrow of the emperor. On the first outbreak against the administration, he took part in its favor, and was furiously abused by his former friends. They became reconciled to him, however, when they selected him, as it were, a fit instrument of their designs, and resolved to ruin him in opposition to Guerrero. Although he had very frequently and openly declared that he would never again hold communion with men who had sought, by the basest means, to destroy the liberties of their country, he did not long hesitate to yield to their solicitations. This party could not have made a better selection. Pedraza had partisans among the *Iturbidistas*, and even with the republicans, and was supported by the whole strength of the *Bourbon* faction. He was, moreover, Secretary of War, and showed himself not over-

scrupulous in using the power that station placed in his hands, to further his views. Officers, whose adherence was doubtful, were dismissed; and to all the states military commandants were sent, to exert their power and influence to favor the election of their chief. There is good reason to believe, likewise, that the wealth of his rich partisans was used to obtain the same end. Notwithstanding all these abuses, Gomez Pedraza was elected President by a majority of only *two votes*. It is very probable, that if the power thus iniquitously acquired had been used with moderation, it would have been preserved without a struggle; but the senate and the supreme court, both bodies created during the reign of the Bourbon party, and both violently opposed to the republicans, commenced at once a series of persecutions against such of their opponents whose talents, liberal principles, or extensive popularity, excited their jealousy, or gave cause of alarm. Several governors of the states of the confederation were impeached on anonymous charges, suspended from their offices, and a design manifested to bring them to condign punishment. One especially, Don Lorenzo Zavala, at that time governor of the state of Mexico, was the chief object of their animosity. He was charged falsely, as we have reason to know, with treasonable practices, and a party of soldiers was dispatched to the capital of the state, St. Augustin de las Cuevas, where he resided, to arrest him. The first intimation he had of being accused, was the order for his arrest, delivered to him by an officer of cavalry, who was accompanied by an escort of soldiers to convey him to prison; a prison which, it was afterwards ascertained, had been fitted up with every precaution to prevent escape, and from which he would probably have been sent to the scaffold. That the governor of a free and independent state, containing nearly a million of people, should be arrested without any other preliminary proceedings, upon the simple order of the executive, is calculated to excite the indignation of every freeman; and yet how is this occurrence narrated by English historians! Speaking of the defection of Santa Anna, who, on being deprived of the office of governor of Vera Cruz, appeared in arms, and declared against the election of Pedraza, as having been effected by fraud and violence, and in favor of General Guerrero, they say:

"In the capital some of the Yorkinos, and among others one of the chief leaders, Zavala, governor of the state of Mexico, evinced a disposition to make common cause with Santa Anna; and Zavala, upon his being denounced to the Congress as a correspondent of that general, confirmed the accusation by flight."

Zavala was not apprised that such an accusation had been preferred against him; he saw

only the order for his arrest, and the soldiers sent to conduct him to prison. He knew the character of his persecutors, and the little prospect he had of obtaining justice at their hands. He foresaw a long imprisonment, to be terminated, too probably, by a violent death, and he fled. He was more disposed to sustain the government than to take part with that chief against Santa Anna, for there was no sympathy between them; but he was driven to rebellion against it by the unjust and tyrannical conduct of his enemies. He would have submitted to the elevation of Pedraza to the presidency, notwithstanding he was an eye-witness to the unjustifiable means used to obtain that election; but he was an object of hatred to the party in power, because he had uniformly, and with great ability and great force of eloquence, supported the federal party and advocated republican principles. These unjust and violent exhibitions of animosity against the best patriots and most deserving men in the country, roused the people to resistance, and produced the catastrophe which drove Pedraza from the country, and placed General Guerrero in the presidential chair. Santa Anna was compelled to retire before the national army, commanded by General Calderon, to the city of Oaxaca, where, after a protracted siege and desperate resistance, he was forced to surrender. He was saved from destruction only by the successful revolution in the capital of the 4th of December; a revolution, we repeat, entirely brought about by the violence and injustice of the reigning faction. We would not be understood as including President Victoria in this charge; he deserved the high encomium pronounced upon him by General Thompson, in the work before us. He was truly a man of inflexible virtue and transcendent patriotism; but his virtues were those of endurance rather than of active usefulness. He was uninformed, and therefore dependent upon his ministers, and above all, very indolent; so that, after the election of Pedraza, he suffered him to direct all the measures of the government until his overthrow and flight, when he reposed the same trust in Guerrero.

The outrageous conduct of the friends of Pedraza brought on the crisis, and it was considered most advisable by the leaders of the opposition to effect the revolution in the capital itself, and, if possible, before the arrival of the armed bands that were known to be on their march from the coast of the Pacific, whose excesses they dreaded. Accordingly, on the night of the 30th of November, 1828, the *acordada*, a large edifice at the entrance of the city, then used as artillery barracks, was seized by the ex-marquis of Cadena, at the head of a battalion of militia. The next morning they were joined by Gen. Lobato, who assumed the command; Zavala

and others, who had been persecuted and outlawed; "and," says the author we have before quoted, "by a multitude of leperos, who were promised the pillage of the capital as a reward for their services." This is not only untrue, but improbable: these leperos resemble the lazzaroni of Naples, unarmed and unaccustomed to the use of arms; what services could such men render! The insurgent forces increased every hour, by the junction of the militia from the neighborhood, and by desertion from the army. Guerrero was proclaimed, and at that period his name would have assembled a host. He visited the *acordada*, and then retired to a distance of three leagues from the city, waiting the result of events, but taking no part in the contest. The city was beleaguered; and although the government made a feeble defense, and must have been conscious of its utter inability to repel an assault, it obstinately refused to accept the terms which were repeatedly and urgently pressed upon it, in order to preserve the inhabitants from the excesses to be apprehended from a body of armed men, hastily collected together, without order or discipline, forcibly entering the city. They continued to resist, after their outposts had been driven in and the defenses destroyed, and until the insurgents entered the principal square; when the soldiers drawn up in front of the palace to defend its entrance, threw down their arms and joined the plunderers, who did not spread themselves like a torrent over the city, as is stated, but concentrated their attack upon the *Parian*, a wooden structure erected in one corner of the square, containing the retail shops principally owned by Spaniards—an extensive bazaar—which they sacked. Order was restored in the course of two or three hours, and an attempt to renew the plunder on the following morning was promptly put down by the energy of the leaders, who ordered out a battalion of light artillery to disperse the mob. Only one citizen lost his life—the Count del Balle—on whose house-top troops had been stationed to fire upon the besiegers. The same column attacked the house of our minister, where several Spanish merchants had taken refuge, but ceased their hostilities upon his displaying the flag of his country. Pedraza had fled from the city, resigned his rights and pretensions to the presidency, and Guerrero was declared the successor of Victoria by the Congress of Mexico. No opposition was made to this change; all the states gave in their adherence to it; the republicans were released from the prisons in which they had been confined by their opponents, and the satisfaction of the people appeared complete. To add to Guerrero's popularity, a Spanish force under General Barradas, which had landed at Tampico with the avowed intention of subduing Mexico, had at this time been vanquished,

and forced to lay down their arms, by General Santa Anna. Every thing combined to render his term of office prosperous; but unfortunately for himself, if not for the country, he was a very vain as well as weak man, and suffered his former enemies and opponents to approach and counsel him. He was flattered by the notice of men of their rank and distinction, and received them into his confidence, gradually putting away all his old partisans and tried friends.

When the way was thus cleared, General Anastasio Bustamante, who had been chosen vice-president, gave the signal of revolt by putting himself at the head of the forces stationed in the state of Vera Cruz. From thence he issued his proclamation, setting forth the abuses and usurpations of Guerrero, and declaring his intention of wresting the government from him. The revolutionary president looked in vain for counsel and succor in this emergency. He had dismissed his republican friends and counsellors, and the persons who had brought him into these difficulties, left him to extricate himself as best he might. He became alarmed at the idea of being besieged in the palace; and under the pretext of placing himself at the head of the troops and marching against Bustamante, he left the capital and retired to his old haunts in the south. Here he was pursued by the relentless animosity of his enemies, and at length captured by a most contemptible stratagem and executed as a *traitor*, by order of government. A more disgraceful outrage never was perpetrated; but as the perpetrators were Bourbonnists, the friends of law and order, so called, the English historians have thought proper to pass it over in silence.

Guerrero, as we have seen, was a very weak man, but he was humane, generous, and brave, and had served his country during her struggle for independence, faithfully and gallantly. He was covered with wounds received in battles with the royalists, and merited a better fate. He had no sooner left the capital than his late friends and advisers seized upon the reins of government. Bustamante was declared his successor, and the administration went blundering on amid the universal disaffection and dissatisfaction of the people, until General Santa Anna availed himself of this public sentiment to place himself in an attitude of hostility to Bustamante, and to pronounce against the existing order of things, that is, to issue his proclamation containing his plan or declaration of views and intentions. This plan was so thoroughly democratic that even the Texans gave in their adherence to it, and the other states following this example, Bustamante was driven forth an exile, and Santa Anna assumed the reins of government. He held them with a firm hand, and being instigated, aided, and

upheld by the anti-republican party, he dismissed the Congress, which thwarted his projects, exiled that stern republican, Gomez Farias, who had been made vice-president, and finally succeeded in converting the federal republic into a central government, the whole power of which he usurped. He was dictator with extraordinary powers—in short, an autocrat. The states, by a stroke of his pen, were converted into departments, and their legislatures into a council of five. Some of the northern states revolted against this monstrous abuse of power; among these were Zacatecas and Texas. The former was put down by the strong arm, and the latter achieved its independence. We perceive that all other right on the part of Texas than that of revolution, is denied by trans-Atlantic writers. They say: "If the people of Mexico preferred a different form of government to that established in 1824, they had the right to effect this change, because it is generally admitted that in a republic the majority must govern." Now, in the first place, it is universally known that this change was effected by the military power, and manifestly against the will of the majority of the people; and in the next, that the federal constitution, copied almost *verbatim et litteratim* from ours, professed to consider and treat the states confederated together by this act as sovereign and independent states, which, like our own, would be set free by a dissolution of the federal union. But it is useless to discuss this question now. The right of revolution is nowhere denied them. Their appeal to arms was successful, and Texas has transferred her allegiance and her territory to the United States of America, which we think she had an undeniable right to do.

But to return to Mexico. Santa Anna's defeat and capture at San Jacinto changed the actors on the stage of public affairs there, but did not vary the scene. Bustamante was restored to the chief magistracy after a brief space of time, and the government continued to suffer all the disorders incidental to an empty treasury and a disorderly soldiery, until Santa Anna was again called from his retirement by the voice of the army, and of his friends and allies, the Catholic clergy. On his return from his unfortunate campaign in Texas, he was regarded by his countrymen with distrust. They believed that he had bargained away Texas for life and liberty, and were moreover mortified by his failure to reduce that rebel state. The revolutionary movement of General Mexico first drew him from his retirement. He solicited and obtained the command of the troops sent to quell this insurrection. The contending forces met near the city of Puebla. The patriots were defeated, and Mexico fell into the hands of his former

friend and comrade in arms, and was shot by his order on the instant.

General Thompson appears to have been seduced, like many others, by the gallant bearing and social qualities of General Santa Anna, into an esteem for his person. He was besides deeply grateful to him for releasing, at his solicitation, many of his unfortunate fellow-citizens who were held in chains in Mexico and Perote—an act, by the way, unworthy a Christian despot, and unparalleled except in Barbary and Borneo. For ourselves, we confess that his whole course has impressed us with the opinion that he is an ambitious, unscrupulous, corrupt, and cruel man, with no redeeming qualities but courage and activity. If the violation of faith, and the murder of the gallant Colonel Fanning and his brave followers, are susceptible of any palliation, which we do not admit, what can be said in justification of the dreadful massacre of his unfortunate countrymen at Zacatecas! But the whole tenor of his conduct as a public man is so generally well known, that we leave him to the judgment of an impartial public.

The only insurrectionary movement in Mexico since 1822, in which General Santa Anna did not take the lead or a very prominent part, was that of Urrea in favor of the federal constitution in 1840, and which was suppressed by the active measures of General Valencia, although President Bustamante was at one time a prisoner in the hands of the insurgents. The following year a combined movement of Paredes at Guadalajara, of Valencia and Lombardini in the capital, and of Santa Anna at Vera Cruz, in August, 1841, overthrew Bustamante after a sanguinary conflict in the streets of Mexico, and again changed the form of government. Santa Anna had recovered his popularity with the army by the part he took in repelling the attacks of the French upon Vera Cruz. As soon as the blockade was established he repaired to the port, and was placed in command of the troops. His presence and activity restored confidence to the garrison, and the enemy were driven back in their attempts to land. On one occasion, while following the French in their retreat to their boats, Santa Anna had his leg shattered by a cannon ball, an event that at once re-established his influence throughout the empire. The downfall of Bustamante was followed by the elevation of this daring chieftain. As was customary with him, he proclaimed his entire submission to the will of the people and of the Congress, merely indicating his preference of a central government strong enough to maintain the peace of the country; but upon Congress exhibiting too great a leaning toward free institutions, he dissolved that body and convened a junta of *Notables*, which framed the "Bases of poli-

tial organization of the Mexican Republic." Strange notions they must have entertained of a republican government! The chief basis of this anomalous fabric is the creation of a president for the term of five years, with power to declare war or make peace, to fine those who disobeyed his orders, to visit the tribunals of justice, reform abuses therein, seeing that a due preference was given to causes which concerned the public weal.

The Bases of the new Government, as its provisions were properly called, for it bore no resemblance to a constitution, provided for a House of Representatives and Senate, to be chosen by a privileged class of electors, an Executive Council and *perpetual Court Martial*, the members of both these bodies to be appointed by the President. This despotic ruler was to be elected every fifth year by the departments which were represented by assemblies of not more than eleven nor less than seven members. He was re-eligible without restriction. On these bases stood Santa Anna, and for a longer period than was usual in that turbulent country administered the government with great firmness, would we could say with justice! The difficulties he had to contend against were numerous and formidable. Among them were, first, a numerous army always inclined to mutiny, who, together with a large band of rapacious civil officers, had to be quieted and paid without a dollar being in the treasury, without the existence of any well-digested system of finance to replenish it; next, his own corrupt nature and that of the favorites who surrounded him; and lastly, the disaffection of a large body of the people, who disliked, and distrusted, and dreaded him. The discontent broke out into open revolt in 1845, and Santa Anna was hurled from the elevation he had usurped by, as it appeared, one universal burst of popular indignation. He was abandoned by all his former adherents, hunted down and arrested by the peasantry, and confined, by order of government, in the castle of Perote. After some not very creditable passages between the Congress and the fallen chief, he was permitted to leave the country with his ill-gotten wealth.

He was succeeded by General Herrera, who was placed at the head of the successful movement against him, and who continued to struggle with the difficulties of his station until the army, habituated to seek payment of their arrears, and to redress real or fancied grievances, by overthrowing one government, setting up another, availing itself of the discontent of the people occasioned by the President's supposed disposition to renew the diplomatic intercourse with the United States, marched upon the capital, under General Paredes, and effected another change of government, or rather of rulers; for it must be evident, from all we have said, that

since the destruction of the constitution of 1824, Mexico has been subject to a military despotism.

MEXICAN MINES AND MINERAL RESOURCES IN 1850.—THE MINES OF MEXICO—MEXICO UNDER THE COLONIAL SYSTEM.—It is generally supposed that the mineral wealth of America was one of the most powerful stimulants of Spanish conquest and emigration; nor is the idea erroneous, if we recollect the manner in which the Castilian power was founded on this continent, and the colonial policy it originated. It will be seen by the tables annexed to this article, that the results have largely fulfilled the hopes of European adventurers, and that the wealth of the world has been immensely augmented and sustained by the discovery of the New World.

In the order of the earth's gradual development under the intellectual enterprise or bodily labor of man, we find the most beautiful system of accommodation to the growing wants or capacities of our race. Space is required for the crowded population of the Old World, and a new continent is suddenly opened, in which the cramped and burdened millions may find room for industry and independent existence. The political institutions of Europe decay in consequence of the encroachments of power, the social degradation of large masses by unjust or unwise systems, or the enforced operation of oppressive laws; and a virgin country is forthwith assigned to man, in which the principle of self-government may be tried, without the necessity of casting off by violence the old fetters of feudalism. The increasing industry or invention of the largely augmented population of the earth, exacts either a larger amount or a new standard of value for the precious metals, and regions are discovered among the frosts and forests of a far-off continent, in which the fable of the golden sands of Pactolus is realized. The labor of man and the flight of time strip commercial countries of their trees; yet, in order to support the required supply of fuel, not only for the comfort and preservation, but also for the industry of the race, the heart of the earth, beneath the soil which is required for cultivation, is found to be veined with inexhaustible supplies of mineral coal!

The bounty and the protective forethought of God for his creatures is not only intimated but proved by these benevolent storehouses of treasure, comfort, and freedom; and whilst we acknowledge them with proper gratitude, we should not forget that their acquirement and enduring possession are only to be paid for by labor, thrift, and social as well as political forbearance.

We do not think these observations out of

place in an article devoted to the mineral wealth of Mexico. The subject of property and its representative metals should be approached in a reflective and Christian spirit, in an age in which the political and personal misery of the over-crowded masses of Europe are forcing them to regard all who are better provided for, or more fortunate by thrift, or the accident of both, as enemies to the poor. The demagogue leaders of these wretched classes, pushing the principle of just equalization to a ridiculous and hideous extreme, have not hesitated to declare in France, since the revolution of February, 1848, that "property is robbery."* We shall not pause to examine or refute this false dogma of a dangerous incendiary. The common sense, as well as the common feeling of mankind, revolts at it. Property, as the world is constituted by God, is the *source* of new industry, because it is, under the laws of all civilized nations, the *original result* of industry. "*It makes the meat it feeds on.*" Without it there would be no duty of labor, no exercise of human ingenuity or talent, no responsibility, no reward. The mind and body would stagnate under such a monstrous contradiction of all our physical and intellectual laws. The race would degenerate into its former savage condition, and force, instead of its antagonists, industry and honest competition, would usurp the dominion of the world, and end this vicious circle of bastard civilization.

And yet it is the duty of an American—who, from his superior position, both in regard to space in which he can find employment, and equal political laws by which that employment is protected, stands on a vantage ground above the confined and badly governed masses of Europe—to regard the present position of the European masses not only with humane compassion, but to sympathize with that natural feeling which revolts against a state of society which it seems impossible to ameliorate, and yet whose wants or luxuries do not afford them support. It is hard to suffer hunger, and to see our dependents die of starvation, when we are both able and willing to work for wages, but can obtain no work upon which to exercise our ingenuity or our hands. It is frightful to reflect, says Mr. Carlyle, in one of his admirable essays, that there is hardly an English horse in a condition to labor for his owner, that is deprived of food and lodging, whilst thousands of human beings rise daily from the obscure and comfortless dens in the British isles, who do not know how they shall obtain employment for the day, by which they may purchase a meal.

To this dismal account of European suffering, the condition of the American conti-

nent affords the best reply. The answer and the remedy are both displayed in the social and political institutions, as well as in the boundless, unoccupied, and prolific tracts of our country. Labor cries out for work and recompense from the Old World, whilst the New displays her soil, her mines, her commerce and her trades, as the best *alms* that one nation can bestow on another, because they come direct from God, and are the reward of meritorious industry. Before such a tribunal the modern demagogues of continental Europe shrink into insignificance, and the laws of labor are effectually vindicated.

The mines of Mexico have been wrought from the earliest periods. Long before the advent of the Spaniards, the natives of Mexico, like those of Peru, were acquainted with the use of metals. Nor were they contented with such specimens as they found scattered at random on the surface of the earth or in the ravines of mountain torrents, but had already learned to dig shafts, pierce galleries, form useful implements, and trace the metallic veins in the hearts of mountains. We know that they possessed gold, silver, lead, tin, copper, and cinnabar. Beautiful samples of jewelry were wrought by them, and gold and silver vases, constructed in Mexico, were sent to Spain by the conquerors, as testimonials of the mineral wealth of the country. The dependent tribes paid their tributes to the sovereign in a species of metallic currency, which, though not stamped by royal order, was yet the representative of a standard value. The exact position of all the mines from which these treasures were derived by the Aztecs, is not certainly known at the present day; but, as the natives were often compelled to indicate some of the sources of their riches to the conquerors, there is little doubt that the present mineral district of the republic is that from which they procured their chief supplies.

The mines of Mexico may be classed in eight groups, nearly all of which are placed on the top, or on the western slope of the great *Cordillera*. The *first* of these groups has been the most productive, and embraces the districts contiguous to Guanajuato, San Luis Potosi, Charcas, Catorce, Zacatecas, Asientos de Ybarra, Fresnillo, and Sombrerete.

The *second* comprises the mines situated west of the city of Durango, as well as those in Sinaboa, for the labors of engineers have brought them so close to each other by their works, that they should be united in the same geological division.

The *third* group is the northernmost in Mexico, and is that which embraces the mines of Chihuahua and Cosguirachi. It extends from the 27th to the 29th degree of north latitude.

* "*La propriété, c'est le vol.*"—Proudhon.

The *fourth* and *fifth* clusters are found north-east of Mexico, and are formed by the mines of Real del Monte, or Pachuca, and Zimapan, or El Doctor. Bolanos, in Guadaluajara, and Tasco, in Oajaca, are the central points of the *sixth*, *seventh*, and *eighth*.*

The reader who will cast his eye over the map of Mexico, will at once perceive that the geographical space covered by this metaliferous region is small, when compared with the extent of the whole country. The eight groups into which the mining districts are divided, occupy a space of twelve thousand square leagues, or one tenth only of the whole extent of the Mexican republic, as it existed previous to the treaty of 1848, and before the mineral wealth of California, and probably of New-Mexico, was known to the world. But as that treaty confirmed and ceded to the United States more than one half of the ancient territory of Mexico, we may estimate the mining region as covering fully one fifth of the remainder.

Before the discovery and conquest of the West Indies and the American continent, Europe had looked to the East for her chief supplies of treasure. America was discovered by Columbus, not, as was so long imagined, because he foresaw the existence of another continent, but because he sought a shorter route to the rich and golden Zipangon, and to the spice regions of eastern Asia. Columbus and Vesputius both died believing that they had reached eastern Asia, and thus a geographical mistake led to the greatest discovery that has ever been made. In proof of these assertions, we may state that Columbus designed delivering at *Cuba* the missives of the Spanish king to the great Khan of the Mongols, and that he imagined himself in Mangi, the capital of the southern region of Cathay or China! "The island of Hispaniola," (Hayti,) he declares to Pope Alexander VI., in a letter found in the archives of the Duke of Varagua, "is Tarshish, Ophir, and Zipangon. In my second voyage I have discovered fourteen hundred islands, and a shore of three hundred and thirty-three miles, belonging to the continent of Asia." This *West Indian* Zipangon produced golden fragments, or spangles, weighing eight, ten, and even twenty pounds.†

Before the discovery of the *silver* mines of Tasco, on the western slope of the Mexican Cordilleras, in the year 1522, America supplied only *gold* to the Old World; and consequently, Isabella of Castile was obliged, already in 1497, to modify greatly the relative value of the two precious metals used for currency. This was, doubtless, the origin

of the edict of Medina, which changed the old legal ratio of 1 : 10.7; yet Humboldt has shown that, from 1492 to 1500, the quantity of gold drawn from the parts of the New World then known did not amount, annually, to more than about one thousand pounds avoirdupois; and the Pope, Alexander VI., who by his famous bull bestowed one half the earth upon the Spanish kings, only received, in return, from Ferdinand the Catholic, some small fragments of gold from Hayti, to gild a portion of the dome of the Basilica of Santa Maria Maggiore—a gift that was suitably acknowledged in a Latin inscription, in which the offering is set forth as the first that had been received by the Catholic sovereigns from India.

Although the income of treasure must have increased somewhat, yet the working of the American mines did not yield three millions of dollars yearly, until 1545. The ransom of Atahualpa amounted, according to Gomara, to about 425,000 dollars of our standard, or 52,000 marks of silver; whilst the pillage of the temples at Cuzco, if Herrera is to be credited, did not produce more than 25,700 marks, or a little more than a quarter of a million of our currency.*

It has been generally imagined, that the wealth of the New World immediately and largely enriched the Spanish kings, or their people, and that the sovereigns under whose auspices the discovery was made participated at once in the treasures that were found in the possession of the Indian rulers. Such, however, was not the case. The historian, Ranké, in his essay on the Spanish finances, has shown, by new documents and official vouchers, the small quantity of the precious metals which the American mines, and the supposed treasures of the Incas, yielded.† It is probable that the conquerors did not make exact returns to the court of their acquisitions, or that the revenue officers appointed at an early period of American history were not remarkable for the fidelity with which they transmitted the sums that came into their possession as servants of the crown, and thus it happened that neither the king of Spain nor his kingdom was speedily enriched by the New World. Baron Humboldt, in one of his late publications, gives an interesting extract from a letter written by a friend of Ferdinand the Catholic, a few days after his death, which exhibits the finances of that king in a different light from that in which they have been hitherto viewed. In an epistle to the bishop of Tuy, Peter Martyn says, that this "lord of many realms—this wear-

* Humboldt's *Essai Politique*, book iv., chap. II. Paris, 1811.

† See Humboldt's essay on the production of gold and silver, in the *Journal des Economistes* for March, April, and May, 1838.

* See Humboldt's essay on Precious Metals, at *aztec*, in note, in the American translation, given in volume 3d of the *Banker's Magazine*, page 500.

† See Ranké, *Fürsten und Völker*, vol. 1, pages 347, 348.

er of so many laurels—this diffuser of the Christian faith, and vanquisher of its enemies—died *poor*, in a rustic hut. While he lived, no one imagined that after his death it would be discovered that he possessed scarcely money enough either to defray the ceremony of his sepulture, or to furnish his few retainers with suitable mourning!*

The adventurers in *America* were, doubtless, enriched, and duly reported their gains to friends at home; but Spain itself was not improved by their acquisitions.

The rise in the prices of grain and other products of agriculture or human industry, about the middle of the sixteenth century, and especially from 1570 to 1595, indicates the true beginning of the plentiful flow of the precious metals to the Old World, in consequence of which their value diminished, and the results of European industry increased in price. This is accounted for by the commencement of the beneficial working of the American mines about that period. The real opening of the mines of Potosi, by the Spanish conquerors, dates from the year 1545; and it was between this epoch and 1595, that the splendid masses of silver from Tasco, Zacatecas, and Pachuca, in New Spain, and from Potosi, Porco, and Oruro, in the chain of Peruvian Andes, began to be distributed more uniformly over Europe, and to affect the price of its productions. From the period of the administration of Cortes to the year 1552, when the celebrated mines of Zacatecas were just opened, the export from Mexico rarely reached annually in value 100,000 pesos de oro, or nearly \$1,165,000. But from that date it rose rapidly, and in the years 1569, 1578, and 1587, it was already, respectively, 931,564, 1,111,202, and 1,812,051 *pesos de oro*.†

During the last peaceful epoch of the Spanish domination, Baron Humboldt calculates the annual yield of the mines of Mexico at not more than 28,000,000 of dollars, or nearly 1,184,000 pounds avoirdupois of silver, and 3,500 pounds avoirdupois of gold. From 1690 to 1803, \$1,380,772,098 were coined in the *only* mint of Mexico; while, from the

discovery of New Spain until its independence, about \$2,028,000,000, or two fifths of all the precious metals which the whole of the New World has supplied during the same period, were furnished by Mexico alone.* It appears, from these data, that the exhaustion of the mines of Mexico is contradicted by the geognostic facts of the country, and, as we shall hereafter show, by the recent issues of Mexican mints. The mint of Zacatecas alone, during the revolutionary epoch from 1811 to 1833, struck more than \$66,882,766; and in the eleven last years of this period from four to five millions of dollars were coined by it every year uninterruptedly.

The general metallic production of the country, which was of course impeded by the revolutionary state of New Spain between 1809 and 1826, has arisen refreshed from its slumber, so that, according to the last accounts, it has ascended to perhaps twenty millions annually in *total* production, in consequence of the prolific yield of the workings at Fresnillo, Chihuahua, and Sonora, independent of the abundant production at Zacatecas.†

The Mexican mines were eagerly and even madly seized by the English, and even by the people of the United States, as objects of splendid speculation, as soon as the country became settled; but, in consequence of bad management, or the wild spirit of gambling, which assumed the place of prudent commercial enterprise, the holders of stock were either disappointed or sometimes ruined. Subsequently, however, the proprietors have learned that prudence and the experience of old Mexican miners were better than the theoretical principles upon which they designed producing larger revenues than had ever been attained by the original Spanish workmen. Their imported modern machinery and engines for voiding the shafts and galleries of water, are the chief beneficial improvements introduced since the revolution; but the enormous cost of transporting the heavy materials, in a country where there are no navigable rivers extending into the heart of the land, and where the usual mode of transportation is on the backs of mules, by wretched roads over mountains and through ravines, has often absorbed large portions of the original capital, before the proprietors even began to employ laborers to set up their foreign engines. Many of the first British and American adventurers or speculators have thus been ruined by unskilful enterprises in Mexican mines. Their successors, however, are beginning to reap the beneficial results of

* *Pet. Mart. Epist.*, lib. xxix., No. 556, 23d January, 1516.

† The peso de oro is rated by Prescott at \$11 65, and by Ramirez at \$2.93. See M. Ternaux-Compans's Original Memoirs of the discovery of America (Conquest of Mexico, page 451). Compans publishes in this, for the first time, an official list, sent between 1522 and 1587, by the viceroys of New Spain, to the mother country. The *pesos de gold* must be multiplied by a mean of \$11.65, in order to give their value in dollars. See Banker's Magazine, at *ante*, page 304, in note. See Prescott's History of the Conquest of Mexico, vol. 1, page 330. Ramirez, in his notes on the Spanish translation of Prescott's History of the Conquest, rates the *peso de oro* at \$2.93. This result is reached by a long financial calculation and course of reasoning. See *La Conquista de Mexico*, vol. 2, at page 86 of the notes at the end of the volume.

* This is Humboldt's estimate in the essay cited in this section. We think it rather too large, yet give it upon such high authority. See our general table of Mexican coinage.

† It will be recollected, that all that is extracted from the mines is not coined.

this expenditure; and throughout the republic steam engines, together with the best kinds of hydraulic apparatus, have superseded the Spanish *malacates*.

"Whenever these superb countries, which are so greatly favored by nature," says Humboldt, in his essay on gold and silver in the *Journal des Economistes*, "shall enjoy perfect peace, after their deep and prolonged internal agitations, new metallic deposits will necessarily be opened and developed. In what region of the globe, except America, can be cited such abundant examples of wealth in silver? Let it not be forgotten that near Sombretete, where mines were opened as far back as 1555, the family of Tagoaga (Marques de Apartado) derived, in the short space of five months, from a front of one hundred and two feet in the out-cropping of a silver mine, a net profit of \$4,000,000; while, in the mining district of Oatorce, in the space of two years and a half, between 1781 and the end of 1783, an ecclesiastic named Juan Flores gained \$3,500,000 on ground full of chloride of silver and of *colorados*!"

One of the most flourishing establishments, in 1842, was the Zacatecano-Mejicano mining company of Fresnillo. Its one hundred and twenty shares, which originally cost \$22,800, were still held by Spaniards and Mexicans. These mines were originally wrought by the state of Zacatecas; but in 1836 Santa Anna took possession, by an alleged right of conquest, and rented them for twelve years to this successful company. In the first half year of 1841, they produced \$1,025,113, at a cost of \$761,800, or a clear profit of \$263,313.

Mexico, under the colonial system, with the immense product of her mines, and notwithstanding the richness of her soil for agricultural purposes, became almost entirely a silver producing country. The policy of Spain was, as we have already often stated, to be the workshop of the New World, while Mexico and Peru were the treasuries of the Old. The consequence of this was natural. Mexico, one of the finest agricultural and grazing lands in the world, but with no temptations to export her natural products, (for she had no markets for them elsewhere,) and no roads, canals, or rivers, to convey her products to seaports for shipment, even if she had possessed consumers in Europe, at once devoted herself to her mines, which were to her both wealth and the representatives of wealth. Her agriculture accordingly assumed the standard of the mere national home consumption, while the pastoral and horticultural interests followed the same law, except, perhaps, within late years in California, where a profitable trade was carried on by the missions in hides and tallow. From this restrictive law of exportation, we, of course, except vanilla, cochineal, and a few other minor articles.

The sources of the wealth of the principal

families of Mexico will consequently be found in her mines; and an interesting summary of this aristocracy is given by Mr. Ward, in his "Mexico in 1827," to prove the fact. The family of Regla, which possessed large estates in various parts of the country, purchased the whole of them with the proceeds of the mines of Real del Monte. The wealth of the Fagoagas was derived from the great Bonanza of the Pavellon at Sombretete. The mines of Balances founded the Vibanos. Valenciana, Ruhl, Perez-Galvez, and Otero, are all indebted for their possessions to the mines of Valenciana and Villalpando, at Guanajuato. The family of Sardaneta, formerly Marques de Rayas, took its rise from the mine of that name. Ota and Mellado enriched their original proprietor, Don Francisco Matias de Busto, Marquis of San Clemente. The three successive fortunes of the celebrated Laborde, of whom we shall speak hereafter, when we describe Cuernavaca, were derived from the canada which bore his name, at Talpujahua, and from the mines of Quebradilla and San Acasio, at Zacatecas. The beautiful estates of the Obregones, near Leon, were purchased with the revenues of La Purisima and Concepcion, at Oatorce; as was also the estate of Malpasso, acquired by the Gordons from the products of La Luz. The Zambranos, discoverers of Guariamey, owned many of the finest properties in Durango; while Batopilas gave the Bustamantes the opportunity to purchase a title and to enjoy an immense unnumbered income.*

Nevertheless, some of the large fortunes of Mexico were made either by trade or the possession of vast agricultural and cattle estates, in sections of the country where there were either no mines, or where mining was unprofitable. The Agredas were enriched by commerce, while the descendants of Cortez, who received a royal grant of the valley of Oajaca, together with some Spanish merchants in Jalapa and Vera Cruz, derived the chief part of their fortunes from landed estates, cultivated carefully during the period when the Indians were under better agricultural subjection than at present.

Thus the mines and the mining districts, by aggregating a large laboring population in a country in which there were, until recently, but few manufactures, and in which the main body of the people engaged either in trades or in tending cattle, became the centres of some of the most active agricultural districts. "The most fertile portions of the table-land are the Baxio, which is immediately contiguous to Guanajuato, and comprises a portion of Valladolid, Guadaluajara, Queretaro, and Guanajuato, the valley of Toluca, and the southern part of the state of Valladolid, which both supply the capital and the mining districts of

* Ward's Mexico in 1827, vol. II., p. 161.

Tlalpujahua, El Oro, Temascaltepec, and Angango; the plains of Pachuca and Appam, which extend on either side to the foot of the mountains upon which the mines of Real del Monte Chico are situated; Itzmiquilpan, which owes its existence to Zimapan; Aguas Calientes, by which the great mining town of Zacatecas is supplied; a considerable circle in the vicinity of Sombrerete and Fresnillo; the valley of Jaral and the plains about San Luis Potosi, which town, again, derives its name from the mines of the Cerro de San Pedro, about four leagues from the gates, the supposed superiority of which to the celebrated mines of Potosi, in Peru, gave rise to the appellation of Potosi. A little further north we find the district of Matehuala, now a thriving town with more than seven thousand inhabitants, created by the discovery of Oatorce; while about the same time, in the latter part of the last century, Durango rose into importance from the impulse given to the surrounding country by the labors of Zambrano, at San Dimas and Guarisamey. Its population increased, in twelve years, from eight to twenty thousand, while whole streets and squares were added to its extent by the munificence of that fortunate miner. To the extreme north, Santa Eulalia gave rise to the town of Chihuahua; Batopilas and El Parral became each the centre of a little circle of cultivation; Jesus Maria produced a similar effect; Mapimi, Cuencame, and Inde, a little more to the southward, served to develop the natural fertility of the banks of the river Nazas; while in the low, hot regions of Sonora and Sinaloa, on the western coast, almost every place designated on the map as a town, was originally and generally is still a real or district for mines.*

Such is the case with a multitude of other mines which have formed the nuclei of population in Mexico. They created a market. The men who were at work in the vein required the labor of men on the surface for their support and maintenance. Nor was it food alone that these laborers demanded; all kinds of artisans were wanted, and consequently towns as well as farms grew up on every side. When these mining dependencies are once formed, as Baron Humboldt justly says, they often survive the mines that gave them birth, and turn to agricultural labors, for the supply of other districts, that industry which was formerly devoted solely to their own region.

Such are some of the internal advantages to be derived from mining in Mexico, especially when the mines are well and scientifically wrought, and when the miners are kept in proper order, well paid, and consequently enabled to purchase the best supplies in the neighboring markets. The mines are, in fact,

to Mexico what the manufacturing districts are to England and the United States; and they must be considered the great support of the national agricultural interests, until Mexico becomes a commercial power, and sends abroad other articles besides silver, cochineal, and vanilla; the two last of which may be regarded as her monopolies. The operation of this tempting character of mines, or of the money they create as well as circulate, is exhibited very remarkably in the rapidity with which the shores of California have been covered with towns, and filled with industrious population.

The tabular statement on the next page manifests the relative production, and improving or decreasing productiveness, of the several silver districts of Mexico during the comparatively pacific period of ten years antecedent to the war with the United States, which commenced in 1846. While that contest lasted, the agricultural and mineral interests and industry of the country of course suffered, and, consequently, it would be unfair to calculate the metallic yield of Mexico upon the basis of that epoch, or of the years immediately succeeding.

From the table it will be seen (omitting the fractions of dollars and of marks of silver) that the whole tax collected during these ten years, from 1835 to 1844, amounted to \$1,988,896 imposed on 15,911,194 marks of silver, the value of which was \$131,267,352; the mean yield of *tax* being \$198,889, and of *silver*, 1,591,119 in marks, which, estimated at the rate of eight dollars and a quarter per mark, amounts to \$13,126,784 annually.

Comparing the first and second periods of five years, we find a difference in the *tax*, in favor of the latter, of \$113,130, or 905,042 marks of silver; showing that, in the latter period, \$7,466,596 more were extracted from the Mexican mines than during the former.

If we adopt the decimal basis of calculation, the returns show, *approximately*, the following results:

In Zacatecas	82 ³ / ₃₂	pr. ct.
" Guanajuato	21 ¹³ / ₃₂	"
" San Luis Potosi	7 ²⁵ / ₃₂	"
" Pachuca	6 ²⁴ / ₃₂	"
" Guadalajara	5 ⁴ / ₃₂	"
" Mexico	4 ²⁵ / ₃₂	"
" Durango	4 ¹⁶ / ₃₂	"
" Guadalupe y Calvo	3 ²⁴ / ₃₂	"
" Chihuahua y J. Maria	4 ²⁵ / ₃₂	"
" Rosario, Cosala, and Mazatlan	2 ²⁵ / ₃₂	"
" Sombrerete	2 ²⁵ / ₃₂	"
" Parral	1 ⁶ / ₃₂	"
" Zimapan	3 ²⁵ / ₃₂	"
" Alamos	3 ²⁵ / ₃₂	"
" Hermosillo	3 ²⁵ / ₃₂	"

* Ward, *ut antea*.

In Oajaca 2 pr. ct.

" Tasco	1	"
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pr. ct. cious metals produced in Mexico, which were
 " either clandestinely disposed of or used in the
 manufacture of articles of luxury.

These statements do not include the pre-

TABLE OF THE GOLD AND SILVER coined in the eight mints of the Mexican Republic, from 1st January, 1844, to 1st January, 1845, according to official reports:

	Mints.	Gold.	Silver.	Total.
Chihuahua,.....	\$51,632 00		\$290,000 00	\$341,632 00
Durango,.....	27,508 00		210,362 30	247,870 30
Guadalajara,.....	5,282 51		950,032 63	955,315 14
Guadalupe y Calvo,.....	95,004 00		838,124 00	933,128 00
Guannajuato,.....	441,808 00		4,219,900 00	4,661,708 00
Mexico,.....	36,173 00		1,688,156 48	1,724,328 48
San Luis Potosi,.....	—		936,525 50	936,525 50
Zacatecas,.....	—		4,429,353 40	4,429,353 40
Totals,.....	\$667,406 51		\$13,065,464 71	\$13,732,861 20

COINAGE OF MEXICO, from 1525 to 1850, omitting fractions of a dollar:

	Mints.	Silver.	Gold.	Copper.	Total.
1835 to 1893, in city of Mexico.....		\$620,000,000	\$31,000,000	\$ —	\$651,000,000
1890 to 1844, ".....		1,604,235,922	88,697,837	5,923,765	1,700,147,514
1811 to 1844, Chihuahua, ".....		4,650,575	568,248	50,428	7,048,551
1811 to 1844, Durango, ".....		21,815,913	1,964,069	—	23,801,982
1812 to 1844, Guadalupe, ".....		17,840,720	364,629	61,217	18,266,566
1844, Guadalupe y Calvo, ".....		338,124	85,004	—	423,128
1812 to 1844, Guasajuato, ".....		50,998,241	4,370,700	—	55,368,941
1827 to 1844, San Luis Potosi, ".....		18,631,428	—	23,617	18,554,445
1810, 1811, and 1812, Sombereete, ".....		1,561,249	—	—	1,561,249
1828, 1829, 1830, Tlalpam, ".....		959,116	203,444	—	1,162,660
1810 to 1844, Zacatecas, ".....		190,375,366	—	107,949	190,483,315

1810 to 1834, Zacatecas,.....	124,915,000	—	20,750	244,665,000
All the Mexican mints, from the end of 1844 to the end of 1849, at the rate of \$14,000,000 per ann., which was the approximate total coinage in 1844.†	—	—	—	70,000,000

Totals,	\$2,465,276,954	\$126,986,021	\$5,566,876	\$2,667,828,851
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RESUME.

	REVENUE.
Silver Coinage from 1836 to 1844, inclusive.....	\$2,465,275.954
Gold " " ""	126,986.091
Copper " 1811 to 1844 ""	6,560.870
General " 1845 to 1849, both inclusive.....	70,000.000

Total Coinage of Mexico to the present time, or in 314 years.....	\$2,657,828,851
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Or, avoiding fractions, nearly \$8,500,000 yearly.

TABLE EXHIBITING THE PLACES AND THE AMOUNT OF TAX COLLECTED AT EACH, ON EVERY MARK OF SILVER, DURING THE TEN YEARS FROM 1835 TO 1844, DESIGNED TO SHOW THE RELATIVE PRODUCTIVENESS OF THE VARIOUS SILVER DISTRICTS THROUGHOUT THE MEXICAN REPUBLIC.

PLACES WHERE THE IMPOSTOR TAX HAS BEEN COLLECTED.	Product of the tax from 1855 to 1859, both inclusive.	Product of the tax from 1860 to 1864, both inclusive.	Increase of yield of the last five years.	Decrease of yield of the last five years.	Value of total Silver product in dollars at \$8 35 per mark.	Mean annual of Silver product in dollars at \$8 35 per mark.
Zacatecas.....	\$350,715 79	\$306,620 51	\$ ———	\$44,095 28	\$43,384,915 70	\$4,338,421 45.
Guajuajuato.....	197,425 62	\$28,498 12	31,074 40	—	28,110,838 20	2,811,083 67.
San Luis Potosi.....	76,692 77	77,378 3 5	1,690 34.5	—	10,101,776 79	1,010,177 5.9.
Pachuca.....	58,805 14	75,654 50	16,849 36.5	—	8,874,345 19	887,434 42.1
Guadaluajara.....	41,620 47	60,067 30.5	18,446 65.5	—	6,704,804 78	670,480 49.1
Mexico.....	31,841 20	63,472 21	31,631 01	—	6,290,911 66	629,094 14.9
Durango.....	49,416 09	40,668 06	—	8,747 23	5,945,613 66	504,560 30
Guadalupe y Calvo.....	10,399 55 5	63,783 06 6	53,404 31	—	\$4,889,775 40	488,977 44.8
Sombrerete.....	38,405 63	19,385 64	—	18,019 81	3,418,243 66	341,824 30.6
Chihuahua.....	23,298 59	19,940 07	—	3,358 52	2,853,480 20	285,348 02.4
Comala.....	24,073 71	15,980 19	—	8,093 01	2,643,566 67	264,356 50
Jesus Maria.....	5,379 81.5	19,502 11 6	11,122 70.1	—	1,844,711 41	184,471 17.1
Parral.....	13,158 71.5	10,716 39	—	2,442 32.6	1,882,872 29	188,287 30
Zimapan.....	8,523 64	9,729 74	756 10	—	1,175,044 60	117,504 39.6
Alamos.....	—	16,806 62.5	16,806 62.5	—	1,109,247 19	110,924 69.3
Hermosillo.....	5,773 03	10,275 01	4,501 80	—	1,059,170 60	105,917 07 2
Rosario.....	2,517 24	8,939 43	6,422 21	—	766,150 96	76 5 03 0
Matatlan.....	—	4,100 54	4,100 54	—	370,040 00	27,004 32.6
Tajaco.....	2,450 38	—	—	2,450 38	161,730 20	16,173 02 4
Tasco.....	1,474 10	—	—	1,474 10	97,290 70	9,729 08 4

Totals.....	\$987,882 78.5	\$1,013,013 37.1	196,906 06.1	\$83,776 25.5	\$121,267,336 40	\$13,133,734 18.4
Deduct decrease.....			83,776 25.6			
Difference in favor of increased yield of tax, and of production during the last period of 5 years			\$113,129 80.6			

* See Report of the Mexican Minister of Foreign and Domestic Relations, for the year 1846, p. 139 of *Documentos Justificativos*.

† The actual coinage of all the mints in the Republic, in 1844, amounted, in fact, to the sum of \$18,732,961; but we assume \$14,000,000 as a fair annual average for a period of several years.

† See Table No. 1, in the Report of the Mexican Minister of Foreign and Domestic Relations, for 1846.

MEXICO.—PRODUCTS OF SUGAR, COTTON, RICE, INDIGO, &c.—Agriculture is about to assume in this country its natural position and importance. Heretofore it has been held in but a secondary consideration. The cause of this was that land was plenty and the population small; but with the increase of population our agricultural and horticultural necessities have increased. Our lands have also increased, taking into the Union all climates, embracing those similar to the tropic and congenial to the growth of tropical fruits and vegetation. We are now looking Asiaward for tea, sugar, canes, fruits, &c. Some of these articles can, no doubt, be found much *nearer home*, and can be obtained at but *little cost comparatively*. I therefore offer, for the benefit of those who feel an interest in this subject, a few agricultural statistics, collected by myself at random, during the late Mexican war, while stationed in the provinces of Tusan and Chicontepec. I must here remark, that very little attention was paid to agriculture in any part of Mexico previous to their independence, or while a colony of Spain, from the fact that the mother country classified her colonies, some of which she devoted to agricultural pursuits, while from others she only abstracted the precious metals. The island of Cuba, on the Atlantic side, and Chili, on the Pacific, were encouraged and directed by the Spanish crown to pursue altogether agriculture. It is a well-known fact that both Chili and Cuba contained mines of copper, silver, and gold. These mines were not allowed to be worked; but the mines of Mexico and Peru were extensively worked. In the latter departments agriculture was forbidden, so much so, that in Peru wheat was not cultivated, but it was supplied from Chili; and Mexico was supplied in coffee and sugar from Cuba, although both these articles could be supplied by the former in greater quantities and of better quality. She therefore rendered her colonies mutually dependent on each other—in fact, keeping the natural resources dormant. Peru possessed naturally a better soil and climate for agriculture than Chili; her natural manures lay in mines inexhaustible, along her coast and on her hills; yet she was not permitted to use them abundantly. Mexico possessed naturally a better soil than Cuba, yet she was not allowed to cultivate more than enough to yield sparingly to her inhabitants; but Cuba was taxed in the agricultural productions to her utmost extent to supply Mexico. The natural productions of the latter were never fully developed, but she was left to herself, and to run wild in a prolific natural growth, without the aid of art; and while agricultural instruments were plenty both in Chili and Cuba, Mexico was destitute of them, and the native was left his machete only to scratch up his prolific soil.

The provinces of Tusan and Chicontepec are blessed with all climates. While we find

the department of Chicontepec very warm, we have the department of Tonticomatlan both cold and warm. But, in order to give a better idea of these provinces, I will here give their boundaries. They are bounded on the north by the district of Tampico; on the east by the Gulf of Mexico; on the south by the districts of Papantla (state of Vera Cruz) and Huanchinango, (state of Puebla); on the west by the district of Hugutla. Its greatest extent from north to south is seventy miles, and from west to east sixty-five miles. It extends sixty-five miles along the Gulf coast. Three rivers empty into the Gulf, off which there is a good anchorage; these are Tanguino, Tusan, and Oazonia. On the latter river there is a French settlement, having purchased their lands under the Mexican law encouraging emigration and settlement. They are employed raising "vanilla, sarsaparilla, sugar, cotton, rice," procuring Indian rubber from the Palo de Ule, or caoutchouc, which grows in great abundance, gum copal, &c. These are exported to France by way of Vera Cruz. Tusan, the beautiful villa, is embraced between three flower-clothed hills, and is built on the banks of the river of the same name, the banks of which are covered with plants and flowers of all varieties; the orchides and legumineses vex the air with their delightful fragrance. The soil and climate are both congenial to vegetation; the river abounds in fish; the woods resound with the sweet notes of the feathered songster. The river meanders through a soil not exceeded in richness and productiveness by any in the world; not excelled by any of the West India islands in its tropical productions. The guava grows wild; so do the lime and lemon. Coffee, cotton of two kinds, the tree grape, sugar cane, rice, cocoa, tobacco, vanilla, indigo, pimento, sarsaparilla, are the indigenous plants of this department. The forest, plains, banks of streams, and the river, are prolific in all kinds of woods, flowers, and beautiful birds. The rich, gaudy, and fragrant plumeria fatigues the air along the upland banks of the river by its beauty and fragrance; the datura, single and double, with its bell-like blossoms, cloy the senses with its fragrance; and the waters are green and fragrant with the leaves and blossoms of the sea-side daffodil, lotus, and other aquatics. In this, nature's favored spot, the shades of night are scarcely drawn over before the ear is assailed by the sweet soft notes of a feathered songster, which come floating in almost seraphic strains through the calm solitude of the night; you are lulled to sleep imperceptibly, and the senses become dormant in a gush of fragrance and music. The morning is ushered in by the loud scream of the cojoleto, or tufted purple turkey, and the noisy chichilaca and chattering voluble parrot. Every tree-top soon has an occupant of the feathered tribe, making the air melodious with

their songs; each hour brings from the shady recesses of the forest a new songster, each day and month its own plant, and each month a climate which vies in healthiness and balminess with its predecessor. Such are the departments of Tuspan and Chicontepec. It is of the productions of this country I intend to give you the full statistics.

We will commence with sugar cane. This article grows in great abundance, and far superior to any of the Cuba varieties. While the Cuba cane requires to be laid every three years, this will continue to yield in good quantity ten or twelve. It is to be much regretted that the mills here are of such miserable construction; merely made of wood, they simply produce from the cane a material called *peloncilla*, which is done up and sent away to be manufactured into sugar. The quantity of *peloncilla* to the almud, or ninety yards square, is about seven thousand pounds. I think this character of cane would answer well in Florida or Louisiana, as it grows wild in the mountain districts of *Ilamatlan*.

The tobacco plant grows wild throughout the provinces of Tuspan and Chicontepec. This article is a government monopoly, and therefore not extensively cultivated by private persons; yet, in its wild state, it is superior to the Cuba varieties. Two crops of tobacco could easily be raised per annum in that part of Mexico, and at much less expense than in any part of the United States.

The country and land is well adapted to the cultivation of cotton. It is produced abundantly, and of a very superior quality. There are found here two species of cotton, both of long staple—the one a bush, the other a vine, which is very prolific, bearing bolls nearly the whole year, or with the exception of one or two months. In the careless manner it is cultivated and cleaned, ninety yards square produce easily 600 pounds of clean cotton; but I have no doubt, by proper attention, with the aid of machinery, etc., this amount could be vastly increased. I would recommend to our southern cotton planters to obtain varieties of the seed, and try them in their plantations. The staple is long and fine.

Three varieties of corn are raised, and two full crops in one year, yielding 70 bushels to the 20 varas, or about 85 yards square. The varieties are soft white, hard yellow, and prolific white, besides a small blue corn, of a very prolific kind. Bread from corn is the principal food of the people, as no wheat is raised in the provinces. Ninety yards square will yield annually 140 bushels of corn.

The black beans of the famous *frigole* grow here in vast quantities, and of a quality far superior to any part of Mexico. Every one who has ever visited any part of Mexico is well acquainted with the famous *frigole* dish brought on the breakfast table by all Mexicans.

Rice grows in great abundance, and of a finer quality, larger in grain, and whiter, than any in the United States. Ninety yards square yield 1,200 pounds of clean hulled rice; properly cultivated, there is no doubt it would yield much more. I recommend this variety to southern planters.

Indigo grows wild in every direction, but its culture is entirely neglected. This article could, no doubt, be profitably cultivated, and the whole of the United States could be supplied from the provinces of Tuspan and Chicontepec.

Fustic, well known in commerce as a dyewood, grows in the extensive forests of this province in great abundance and vast size. Quantities are yearly shipped to France, and from thence to this country. It could be transported direct to the United States at much less expense, and would, no doubt, be profitable.

Pimento grows wild everywhere, and is ripe about the month of September.

Sarsaparilla is indigenous, and grows wild in great abundance, and can be obtained all the year round.

Every rancho has its apiary, and honey was in great abundance and cheap. This could, no doubt, be made a profitable business.

The argave Mexican, *petat*, and long-leaved machette grow here in great abundance, and hemp is made from them equal to Jute or Sisal. This part of Mexico being near to us, the articles could be obtained here better and cheaper than at Sisal or the East Indies.

Cocoa grows finely and of much better quality than that from Tabasco; but owing to the port of Tuspan not being one of entry, this article has not been extensively gathered for exportation, but is used in preference to all other kinds by the inhabitants.

The Indian rubber tree grows in great abundance, and the gum produced from it is of a superior quality; yet, owing to the causes stated above, but little is gathered.

Gum copal can be obtained in great abundance from the tree producing it, as it is indigenous to this part of Mexico; besides, many other gums used in commerce can be and are found here in great quantities.

The vanilla aromatics grows well, and those trees adapted to its culture are numerous. This plant, being a parasite, requires for its propagation trees which do not shed their bark—a climate warm, and regular temperature to cure and preserve them. It is used to flavor ice creams, cakes, candies, soaps, and perfumery. A specimen of this plant can be seen at the National Conservatory; it is worth in commerce from twelve to sixteen dollars per pound. A few vines will yield this quantity. It is one of the most valuable productions of Mexico. I think the vine could be propagated in Florida on the *orange* tree.

Oranges, lemons, plantains, bananas, and

pine-apples grow in great abundance, of a finer and better quality than those grown in Cuba. — *W. D. Porter.*

MANUFACTURING INDUSTRY.—

THEORY OF MANUFACTURES—THEIR PROGRESS

—ORIGIN AND GROWTH OF COTTON MANUFACTURES

IN ALL COUNTRIES—UNITED STATES

MANUFACTURES—SOUTHERN MANUFACTURES.—

Though every nation be, in fact, primarily dependent upon its soil for the means of support, none can be said to be purely agricultural. Some changes or modifications will take place in the raw material, in the lowest state of society; and even where, in a more advanced period, the vast proportion of the people are employed upon the soil, as is the case in the north of Europe, some kinds of manufactures, however rude, will still gradually grow up.

Many of the great trading states of antiquity were also great manufacturing ones. Indeed, without such manufactures any very considerable trade could not be conducted, unless it be the "carrying trade." It is in the nature of manufactures to be regardless of distant and foreign markets. The home demand is ever too narrow, for whilst one agriculturist may be unable to supply the wants of more than four or five persons, a manufacturer can as easily supply those of a hundred. Great Britain, the greatest commercial power on earth, exports no raw produce other than sea-coal.

In the most polished period of Greece and Rome, manufactures were regarded as essentially *servile*, and unworthy the attention in any way of freemen. The same spirit has come down to us in many parts of our country, and is with difficulty subdued. It was maintained that such employments were hurtful to the strength and agility of the human body, and to its capacity for enduring the fatigues of war. The whole field was restricted to slaves.

There are various modes by which the higher manufactures may be introduced. They may be by a gradual improvement and refinement of the primitive, rude operations of the people, or the imitation of the more showy and splendid fabrics of other countries, and for which commerce introduces a taste. In the first case may be classed the Chinese and other Eastern products; in the last, the wool, silk, and other manufactures of England, &c., &c.

They do not always indicate national prosperity, as frequent experience has shown, though in general they constitute a good criterion of it. In the midst of the most destructive foreign wars, the greater part of the manufactures may frequently flourish, says Adam Smith, and on the contrary, they may decline on the return of peace. They may flourish amidst the ruin of their country, and

begin to decay on the return of its prosperity.*

Manufactures contribute to opulence and luxury, the growth of cities, and their splendour; but the almost incessant concomitant is dense population, and all the evils in its train—poverty, suffering, ignorance and crime. These occur only in the most highly advanced state, and are dependent much, perhaps, upon unwise laws for their intensity. When the manufacturing spirit reaches this point, it becomes a great social and political evil.

The melancholy spectacle which Great Britain presents, is not without its warning. It is possible to stimulate this branch of industry to the point of national degradation. Mr. Alison furnishes a frightful picture. "Great Britain," says he, "is to be regarded as a great workshop, which diffuses its fabrics equally over the frozen and the torrid zones; which clothes alike the negroes of the West Indies, the laborers of Hindostan, the free settlers of Canada, the vine growers of the Cape, and the sheep owners of New-Holland and Van Diemen's Land. The rapid increase of the human race in these advanced posts of civilization sustains and vivifies our empire, notwithstanding all the burdens consequent upon our political situation; and in spite of the prodigious increase in the power of machinery, has called into being an enormous and perilous manufacturing population.

"It is utterly impossible that this unparalleled growth of our manufacturing industry can co-exist with the firm foundations of public prosperity. Its obvious tendency is to create immense wealth in one part of the population, and increased numbers in another; to coin gold for the master manufacturer, and to multiply children in his cotton-mill; to exhibit a flattering increase in the exports and imports of the empire, and an augmentation as appalling in its paupers, its depravity, and its crimes."

The true position to be taken undoubtedly is, that the prosperity of no country can be considered permanent and stable, which is wholly dependent upon any single one of the three great industrial pursuits of commerce, agriculture, or manufactures, but that, however any one may prevail, the others must be suffered to grow up by its side, without discouragement. In the *natural* state of things they will so grow up upon a secure and imperishable foundation.

The progress of manufactures in the old European states has been, for the most part, the result of their colonial empires established in the eastern and western worlds. The markets of these colonies for manufactured goods were limited to the parent state, and they were prohibited from sending their raw produce to any other source, or to work it up

* Smith's Wealth of Nations, li. 104.

into any form of manufactures. Of the whole exports of manufactured goods in 1836, by Great Britain, somewhat more than one half were to her own colonies.

Before the close of the seventeenth century, (1699,) the Parliament of England declared that the American plantations should ship no wool or yarn manufactures. This was a blow at their infant attempts in the coarsest goods.

In 1719 it was declared, that the existence of manufactures in the colonies lessened their dependence upon Great Britain; in 1782, that the convenience of the Americans from the plenty of beavers, hare, coney wool, and many other furs, gave them such advantages, that, unless restrained, they would soon supply all the world with hats. In the report of the Board of Trade, the same year, it is said New-England, New-York, Connecticut, Rhode Island, and Pennsylvania, have fallen into the manufacture of woollen cloth, for the use of their own families only, and linen cloth; hemp and flax they manufacture into coarse cloth, bags, traces and halters; some iron is manufactured in Massachusetts; also a bounty is given for the manufacture of duck or canvas by the Assembly; brown hollandes are made, also small quantities of cloth for shirts, paper to the amount of £200 a year; nails, bar iron, hollow ware, &c.; ships are built for the French and Spaniards; hats are made and exported to Spain, Portugal, and West India Islands; several still-houses and sugar refineries exist, &c.

In this alarming state of things, the Board remark, it were to be wished that some expedient might be fallen upon to divert their thoughts from undertakings of this nature, so much the rather, because these manufactures may be carried on in process of time in greater degree, unless an early stop be put to their progress!

"From the foregoing statement it is observable, that there are more trades carried on and manufactories set up in the provinces on the continent of America, to the northward of Virginia, prejudicial to the trade and manufactories of Great Britain, particularly in New-England, than in any other of the British colonies."

In 1750, the Americans were forbidden to work in iron; and Lord Chatham declared not long after in Parliament, that the colonies of North America had not even the right of manufacturing a nail.

During the revolution, and under the articles of federation, our manufacturing system made but little progress, though, in fact, such articles of plain construction as were necessary to our uses, were made.

In 1787, while the National Convention,

which framed the Constitution, was in session in Philadelphia, a second convention met in that city, of the "Friends of American manufactures."

The object of the Convention was to consider the condition of this branch of industry, so much affected by the system of duties and imposts which prevailed between the states.

Tenche Coxe, of Philadelphia, made a report to the Convention, in which he urged the establishment and encouragement of domestic manufactures with very great ability, thus connecting himself with the earliest movements of the kind in the Union. He takes a survey of the whole subject in all its lights, and, without doubt, supplied much of the material afterwards used by Alexander Hamilton in his celebrated report upon the same subject. The enumeration which Mr. Coxe makes of the articles then manufactured in the country has no little interest: meal of all kinds, ships and boats, malt liquors, distilled spirits, potash, gunpowder, cordage, loaf sugar, pasteboard, cards and paper, snuff, tobacco, starch, cannon, muskets, anchors, nails, and many other articles of iron, brick, tiles, potter's ware, mill-stones, &c., cabinet ware, trunks and Windsor chairs, carriages and harness of all kinds, corn fans, ploughs, &c., saddlery, &c., boots, shoes, leather, hosiery, hats and gloves, wearing apparel, coarse linens and woollens, and some cotton goods, lineseed and fish oils, wares of gold, silver, tin, pewter, lead, brass and copper, clocks and watches, wool and cotton cards, printing types, glass and stone ware, candles, soap, &c., &c.

"The encouragement and protection of manufactures" appears among other things, in the preamble of the first tariff act, under the present Constitution, 1789; and in 1791, the Secretary of the Treasury, Alexander Hamilton, in answer to a call from the House of Representatives, submitted that celebrated report upon manufactures which has won for him the title, in all subsequent times, of "father of the American System."

This able statesman went elaborately into the politico-economical questions of manufactures, weighing with nice deliberation their national advantages and disadvantages, and presenting a very powerful array of facts in support of his positions. The division of labor; the extension and use of machinery; the additional employment to classes in the community not ordinarily engaged in business; the promotion of emigration from foreign countries; the furnishing greater scope for diversity of talents and dispositions, which discriminate men from each other; the affording a more ample and various field for enterprise; the creating in some instances a new, and securing in all a more certain and steady demand for the surplus produce of the

* McPherson's Annals, Com.

gail; are the prominent advantages he anticipated from manufactures.*

Mr. Hamilton goes afterwards into an enumeration of what had already been achieved in America, and draws from it the most flattering hopes of the future. He thus classifies the manufacturing products of that period:

1. Of *Skins*:—Tanned and tamed leather, dressed skins, shoes and boots and slippers, harnesses and saddlery, portmanteaux and trunks, leather breeches, gloves, muffs and tippets, parchment, glue, &c.

2. Of *Iron*:—Bar and sheet iron, nails, steel, implements of husbandry, stoves, pots, and other household utensils, steel work of carriages and for ship building, anchors, scales, beams and weights, tools of artificers, arms of different kinds.

3. Of *Wood*:—Ships, cabinet-ware and turners; wool and cotton cards and other machinery for manufactures and husbandry, mathematical instruments, coopers' wares, &c.

4. *Flax and Hemp*:—Cables, sail-cloth, cordage, twine and pack thread.

4. *Miscellaneous*:—Bricks, coarse tiles and potters' wares, ardent spirits and malt liquors, printing, writing, and other papers, hats of fur and wool, &c., women's stuff and silk shoes, refined sugars, oil of animals and seeds, soap, spermaceti and tallow candles, copper and brass wires, distillers' wares, sugar refiners and brewers, andirons and other household utensils, philosophical apparatus, tin wares, carriages, snuff and manufactured tobaccos, starch and hair powder, lamp black and other painters' colors, gunpowder, &c.

These he states had arrived to considerable maturity, and are as applicable to the southern as to the middle or northern states. Great quantities of coarse cloth, coating, serges, and flannels, linsey-woolseys, hosiery of wool, cotton and thread, coarse fustians, jeans and muslins, checked and striped cotton and linen goods, bed-ticks, coverlets and counterpanes, tow lins, coarse shirtings, sheetings, towelling and coarse linens, and various mixtures of wool and cotton, and of cotton and flax, were made in the household way, and in many instances to an extent not only sufficient for the supply of the families in which they were made, but for sale, and even in some cases for exportation. It is computed that in a number of districts two thirds, three fourths, and even four fifths of all the clothing of the inhabitants are made by themselves.

Mr. Hamilton then goes into the question of protection, and finally into an enumeration of the materials of manufacture abundantly existing in the country, and the infant

attempts in some of them. The list includes iron, copper, lead, coal, wood, skins, grain, flax and hemp, cotton, wool, silk, glass, gunpowder, paper, &c., sugar and chocolate, &c., &c.

In the year 1791, according to the report of Albert Gallatin, made in 1810 by resolution of the House of Representatives, the first cotton mill was erected in Rhode Island; in 1795, another in the same state, and two more in the state of Massachusetts, in 1803 and 1804. Before 1808 fifteen in all were in operation, working about 8,000 spindles. By the end of 1809, 87 mills were being or had been erected, requiring 80,000 spindles, and with a capital employed of \$1,800,000. The amount of cotton used was 3,600,000 lbs.; yarn spun, \$3,240,000; persons employed, 4,000. Many of the mills were also engaged upon wool. Mr. Gallatin furnishes the result in 14 woollen factories, which were not the whole. The cloths are represented as superior in quality, but inferior in appearance to the imported article of the same price.

Mr. Pitkin states the first cotton factory in the United States was established by Samuel Slater, a cotton manufacturer from England, called the father of American cotton manufactures, and that President Washington delivered his speech to Congress, in 1790, in a suit of broadcloth from a factory in Connecticut.

In 1810, according to Gallatin, wood, leather, &c., soap, candles, spermaceti oil, &c., flaxseed oil, refined sugar, coarse earthenware, snuff, chocolate, hair powder and mustard, were manufactured in quantities large enough to supply the whole consumption.

He names a number of others supplying a greater or less part of the whole demand, some then but in early progress; among the last were paints, &c., medicinal drugs, salt, japanned ware, calico printing, earthen and glass ware, &c., &c.

"From the imperfect sketch," says Mr. Gallatin, "of American Manufactures, it may with certainty be inferred that their annual product exceeds one hundred and twenty millions of dollars. And it is not improbable that the raw materials used, and the provisions and other articles consumed by the manufacturers, create a home market for agricultural products not very inferior to that which arises from the foreign demand. A result more favorable than might have been expected, from a view of the natural causes which impede the introduction, and retard the progress of manufactures in the United States."

The census of 1810 included a return of the manufacturing system of the Union, according to the suggestion of the Secretary, but was very deficient, from the haste in

* Am. State Papers, Finance, vol. I. 134.

which the items were obtained. The results were prepared and digested by Tenche Coxe, appointed for that purpose.

The number of cotton mills returned was 168, with 90,000 spindles. The woollen fabrics at that period were principally made in families. Of wool, cotton and flax, the manufacture was greatest in New-York, including, of course, family workmanship, though Virginia manufactured the greatest number of yards; and what is singular, Virginia, the two Carolinas, and Georgia, manufactured greatly more in quantity and in value than the whole of New-England together, and North Carolina produced double the number of yards of Massachusetts! The whole value produced in these articles was estimated at \$40,000,000.

During the war, manufactures received an extraordinary stimulus. Capital flowed in upon them. On the restoration of peace, the whole immense stock of foreign manufactures, for some time accumulating, was thrown into the country, and sold at ruinous sacrifices. It was well worth while, said Mr. Brougham, to incur a loss upon the first exportation, in order, by the glut, to stifle in the cradle those rising manufactures in the United States, which the war had forced into existence, contrary to the natural state of things.

The history of the cotton manufacture, in all countries, and from the earliest antiquity, possesses the highest degree of interest, and will not be out of place before proceeding any further in the discussion of our own manufactures. In India, from the remotest times, this industry has been prosecuted without improvement in machinery, but with extraordinary manual facility. Common muslins are made in every village. Those of Daeca are of the most exquisite fineness, and are used by the lords, and called "webs of woven wind." The importation of these manufactures into Europe has been almost entirely arrested by the progress made there in the same fabrics. India has indeed become herself an extensive importer.

In China, though long before the Christian era cotton cloth is noticed, not before the eleventh century is it supposed to have been extensively produced. The opposition of wool and linen makers retarded the progress until the close of the fourteenth century, when it rapidly advanced. At the present day, nine tenths of the population are clothed in cotton. Large quantities of the wool are imported into China.

The cotton manufacture was introduced into Europe by the commercial states of Italy, about the year 1500; from Italy it passed to the Netherlands, and was carried over to England early in the seventeenth century, by Protestant refugees. In 1641,

Manchester is mentioned in the "Treasure of Traffic" as engaged in this industry.

The manufacture was greatly improved by John Wilson, of Ainsworth, in a variety of ways; but principally in dressing, finishing and dyeing.

All the yarn produced was by the one-thread spinning wheel, the only machine then used, and which put a practical check upon manufactures. In weaving, some advances had already been made by the fly-shuttle; also, a great improvement in carding, by the cylindrical carding engine.

In 1767, a great revolution was effected by the spinning-jenny, invented by James Hargreaves. "The progress of invention after this was rapid; for when it was seen that with the aid of the few mechanical combinations we have mentioned, the spinner had been able to increase his power of production nearly eighty-fold, the attention of those engaged in other branches of manufacture was awakened to the possibility of introducing changes equally beneficial in their peculiar employments."

Against this fearful innovation the populace, supported by the old process, rose up in rebellion and riot, and destroyed every machine that could come within their reach.

Whilst all this was going on, a humble barber boy, the youngest of thirteen children, in Lancashire, Richard Arkwright, conceived the idea that the spinning process might be greatly improved. With scarcely any science, and no means, he matured a plan in which, after many difficulties and trials, he obtained the countenance of some capitalists. The result was, in 1769, the "spinning-frame" was patented, for the discovery of which the author was knighted, and for which he is immortalized. No attempt to extend the principle of the frame was made until 1810, when the throstle was introduced, which last was improved by Mr. Danforth, an American spinner, and Mr. Montgomery, of Great Britain.

The next great invention was that of Samuel Compton, in 1775, the "mule jenny," which entirely superseded Hargreave's jenny, being capable of producing the very finest yarns, which the other could not. As much as twenty guineas the pound was received for some, from Tobago cotton.

Various other important improvements have from time to time been introduced into all the departments of this manufacture, which have increased the productive power, extended the consumption, and diminished the price of fabrics to an inconceivable extent.

The manufacture of muslins began in England in 1785, and rapidly extended. Dimities were produced in the north of England, ginghams in Lancashire, cambrics in the same place and in Glasgow, and also, in the last, the bandana handkerchiefs, in imitation of those of the East.

About 1773, cotton calicoes began first to be fabricated at Blackburn, and in 1805 the pieces sold there were estimated at one million, but the process of hand-weaving was unfavorable to their extension.

It was in 1787 that the great desideratum of power-loom weaving was supplied by the ingenuity of Mr. Cartwright, who erected a factory immediately after. In this he was followed by others, but it was not, perhaps, before 1805 that the power looms may be said to have gone into very successful operation. The struggle with the hand-loom weavers was long and bitter.

The conversion of the stocking frame into a machine for weaving point lace was perfected in 1809, and the manufacture increased with extraordinary rapidity, so that by 1823 the productions of France and the Netherlands were rivalled. It is in this our finest Sea Island cottons are used.

The cotton manufacture was introduced into France about the year 1765, and the yarns were at first brought from Turkey in a dyed state. The progress of this manufacture and its perfection, though considerable, are greatly behind that of England, except in the articles of dyed goods and sewed muslins.*

Spinning machinery was not introduced into Switzerland until 1798. Under a perfect system of free trade the manufacture of cotton goods has progressed steadily and extensively throughout the cantons, which exhibit the utmost industry and enterprise.

Austria, under her despotic government, has made little progress in manufactures. Saxony has a population favorable for their successful prosecution.

In Prussia the industry has extended very rapidly; and in addition to the large quantities of cotton wool annually spun, immense amounts of yarn are received from England to be worked up into cloths. Some of these are, it is said, returned to England.

Russia is also a vast consumer of English yarns, and the manufacture has been advancing in that country; the same may be remarked of the Italian states.

We have already furnished a sketch of the origin and early progress of the cotton manufacture in the United States, down to the close of the last war with Great Britain. We resume from that period.

The national debt of the United States being very nearly liquidated, measures began to be agitated in 1831-2, in regard to the reduction of the then existing tariff. The Secretary of the Treasury, Hon. Louis McLane, was requested to collect the statistics of the manufacturing system of the country, and report to the next Congress. From the haste in which this duty was executed, and the imperfect returns, nothing resulted but a crude mass of

minute particulars, embraced in two volumes, which no one, so far as we know, has ever undertaken to digest, and which are therefore of no practical value.

About the same period two great conventions were held in the United States—the one called Tariff, and the other Anti-Tariff Conventions. These instructed committees to make the necessary investigations, in order to memorialize, and thus influence the action of Congress. At the head of the Free Trade Committee was Albert Gallatin.

This gentleman proceeds to show that, independently of protection, the home manufacture had greatly increased in the proportion of its commodities consumed to those of foreign make. He remarks, from the imperfect data obtained in 1810, the domestic manufactures formed from two thirds to three quarters of the total amount of manufactures consumed. By 1823 the domestic had increased between 121½ and 136 per cent, and the amount of foreign manufactures was in 1824 from one fifth to one sixth, whilst in 1801 it was one third to one quarter of the whole amount consumed. This showed a considerable relative increase of the domestic.

The Tariff Committee confined their inquiries to the states of Virginia, Maryland, Maine, Vermont, New-Hampshire, Massachusetts, Connecticut, Rhode Island, New-York, New-Jersey, Pennsylvania, and Delaware.

In these states there were 795 factories, with a capital of \$40,000,000; 1,246,508 spindles, producing 10,642,000 lbs. yarn, 230,461,900 yards cloth, and consuming 77,657,816 lbs. cotton, or 214,882 bales cotton; annual value of product, \$26,000,000. A further capital of \$32,000,000 was estimated as employed in machine shops, bleacheries, and print houses.

In the southern and western states thirty establishments were returned but vaguely. Indeed, it was said the manufacturers everywhere had underrated their operations, on the fear of taxation, etc.

The whole annual product of cotton manufactures in 1834, Mr. Pitkins estimates at \$40,000,000, including those of families, not embraced in the report above, and correcting deficiencies; and in 1831 the consumption of the raw material was about one third of that of Great Britain, equal to that of France, and double the rest of Europe.*

Previous to 1825, it is estimated we consumed often two millions pounds a year of raw cotton grown abroad, and Mr Woodbury, in his able cotton report in 1836, estimates the whole amount of raw cotton consumed in the United States, in 1835, 100,000,000 lbs., of the value in goods, varying between 50 and 70 millions dollars, 45 to 50 millions being in factories. The whole import of foreign cotton goods at the same time averaged seven

* This in 1831. Encyclop. Brit.

* Pitkins, 436.

millions a year above the export of the same kind of goods.

In 1840, the census returned for the whole Union gives the total number of cotton factories, 1,246; number of spindles, 2,284,631; product, \$46,350,443; capital invested, \$51,102,359; one third of this amount is due to Massachusetts, one sixth to Rhode Island, one ninth to Pennsylvania, and one twelfth to New-Hampshire. Illinois, Missouri, Arkansas, Michigan, Florida, Wisconsin, Iowa, and District of Columbia, had no product.

Since that period the consumption of cotton has greatly increased in all the northern states, under the powerful stimulus of the tariff of 1842, continued even under the less favorable one of 1846. The southern states, especially North Carolina, South Carolina, and Georgia, have entered much more largely into manufactures. Alabama and Florida have followed, the same of Tennessee. The increase of cotton manufactures in the valley of the Ohio has been extraordinary within the past few years.

The amazing growth of Great Britain since the beginning of the century has been the result of her manufacturing system, and especially of cotton. It was long supposed the Americans could not compete in this latter manufacture, from the high price of labor with them, and Mr. Hamilton discusses the question as early as 1790. We have seen that the manufacture had grown up in 1824, the point of the first *strictly* protective tariff, to a considerable stature; the low value of agricultural products and cheapness of raw material counterbalancing, no doubt, the difference in labor and interest. Our being able to sell some coarse goods in England evinces this. Nor is it to be supposed, that in the advance of our country in population, the proportion between the value of labor in the two will be so far removed. It is but natural the United States should become a great manufacturing country, and judging from the past and present indications, she will be enabled to supply, with her manufactured goods, every nation in the world.

Mr. Montgomery, an experienced English cotton manufacturer, having visited the United States, published, in 1840, an able work, contrasting our factories with those of Great Britain. He says:

"The amount of goods produced is much greater in America than in Great Britain, but the hours of labor are somewhat longer in the former country. The cost of buildings, machinery, &c., is a great deal higher in America, as well as the general rate of wages. The British manufacturer, upon the whole, can produce 19 per cent. cheaper; but this is more than neutralized by the lower price of cotton. In every description of goods in which the cost of the raw material exceeds that of production, the American manufactur-

ers have a decided advantage over the British; the experience of every British manufacturer engaged in producing this description of goods, has painfully convinced him that the superior quality of the American is gradually driving him from every foreign market. Hitherto the British have enjoyed a monopoly of fine goods, but the resources of the Americans will soon enable them to compete successfully in these. They will adopt a more economical method of getting up their works, a more improved system of management, &c., &c., which will enable them to compete successfully with the British. And, indeed, he says the manufacturers here can afford to pay higher wages than the British, because they run their factories longer hours, drive their machinery at a higher speed, from which they produce a much greater quantity of work, at the same time they can purchase their cotton at least one penny a pound cheaper, and their water power does not cost above one fourth of the same in Great Britain."

"In passing through the streets of Constantinople," says Mr. Jas. Lawrence, in a letter to the late Secretary of the Treasury, "during a stay of several weeks in that city, in the year 1848, I was attracted by the cry of 'Americanas!' 'Americanas!' from pedlars carrying packs of cotton goods upon their backs. On examining the goods I found they were of British manufacture, which led me to inquire the cause of their being hawked about as American fabrics. My informant told me that a few years before some American cottons found their way from Smyrna to Constantinople, and were there sold. Their superiority was so appreciated by the consumers, that since then the pedlars, in order to obtain a higher price for inferior fabrics, whether of British or foreign manufacture, are obliged to give them the American name." The same state of things, Mr. Lawrence continues, exists in the markets of Alexandria and Cairo. In Asia Minor genuine American goods are sold.

The home consumption of cotton for manufactures has increased from 149,516 bales in 1826, to 487,769 bales in 1849-50. But these are not favorable years for comparison, as the following figures will show, though we must add to them the consumption in the southern and western states to have the whole amount:

COTTON CONSUMED BY AND IN THE HANDS OF HOME MANUFACTURERS.

SALES.	SALES.
1849-50....487,769	1837-8....346,063
1848-9....518,039	1836-7....293,540
1847-8....531,772	1835-6....296,783
1846-7....427,967	1834-5....216,888
1845-6....432,597	1833-4....196,413

* Montgomery, 126, 128.

BALES.	BALES.
1844—5....389,006	1832—3....194,412
1843—4....346,744	1831—2....173,800
1842—3....325,129	1830—1....182,143
1841—2....287,850	1829—80....124,512
1840—4....297,288	1828—9....118,852
1839—40....295,198	1827—8....120,593
1838—9....276,018	1826—7....149,516

In the southern and western states, where the manufacture has only lately been introduced, the increase has been from 75,000 bales in 1848 to 107,500 in 1850. The whole number of mills now reported in these states is 153, working 242,880 spindles. The figures are below the facts, and we may expect in a few years to see this profitable branch of industry monopolized by them.

"The present consumption of cotton in the United States," said Gen. Talmadge, at the last fair of the American Institute in New-York, "is estimated at 500,000 bales per annum, which is more than the entire crop in 1824. This does not include a vast quantity which goes up the Mississippi, Ohio, and also out from the Tennessee and Cumberland rivers, for the supply of the mills in Indiana, Ohio, Western Virginia, and Pennsylvania. There are said to be upwards of two hundred and fifty cotton mills south of Mason & Dixon's line: in these points and sources of consumption, it is believed 150,000 bales are used, making a total not less than 650,000 bales worked up at home. The quantity of cotton goods made in the United States is estimated at 720,000,000 of yards, of which about 80,000,000 are exported, leaving 640,000,000 for home consumption."

We conclude with a few remarks from the address of Dr. Antiell, at the same fair, regretting that we have been unable to examine the other manufactures of the country with the same minuteness as cotton, and referring the reader to our published volumes for a vast variety of information upon the subject of cotton and its manufacture in the south, the Union, or abroad:

The vastness of the cotton trade, and the suddenness of its growth, naturally astonishes us. It is the agricultural wealth of the southern states. It would be well to recollect that it is England's manufacturing wealth. We export nearly five sixths of all we grow; in exact numbers, in the year 1848:

The total cotton crop was....2,726,596 bales.
The export of 1848, as above...2,227,944 "

which, with a small stock on hand, left 518,652 bales for home consumption.

England is the chief buyer of the raw cotton, and the chief manufacturer of cotton prints, and this country is at present dependent on that island for the chief supply of cotton piece goods. The British export of cotton goods of

all kinds, in the six months ending June, 1849, was 596,370,322 yards, of which the greater quantity came to this country.

There is, however, some comfort exhibited by the returns of the last twenty years: from these it appears that the imports now of plain calicoes are one half what they were in 1830, and in printed calicoes between one half and one third; so that our cotton manufactures are gradually increasing, and at the present time represent one fifth the value of all manufactured goods.

The exports of cotton manufacture are small, not having increased of late years, standing nearly at the same figure as in 1829; so that our increased supply has been for home consumption, an increasing population demanding it. (See Cotton Manufactures.)

MANUFACTURES—INDUCEMENTS FOR IN THE SOUTH AND WEST.—The civil arts embrace the three great pursuits of agriculture, manufactures, and commerce; and these are so intimately connected and interwoven, that in writing an essay upon one, we must necessarily have frequent reference to the others. They are the great civilizers of the nations of the earth, and where they flourish most, there we may expect to find the highest state of moral improvement. As they spread and extend from country to country, they carry with them something of the minds of those who conceived and improved them. When the people of one nation adopt the pursuits of another, they must necessarily adopt the ideas and reasoning connected with those pursuits; and thus a sympathy is established between nations who were before strangers, and perhaps enemies to each other. By the intervention of commerce these sympathies are cultivated, and a community of interest is established which binds together the whole commercial world.

Hence it will be perceived that any important change which may be introduced in reference to either of these three great pursuits must be felt throughout the entire commercial circle; and the introduction of manufactures in the southwestern states, if prosecuted upon a scale commensurate with the resources of the country, will constitute a new era in the history of the civil arts.

In considering of the propriety and utility of introducing manufactures into any given district, it will be proper to take into view every circumstance that can in any wise affect the particular pursuit proposed for adoption. The character of the population, the climate, the soil and its products; the particular and relative location of the country, together with its mineral and other natural productions—all these and many other subjects will naturally present themselves for discussion and for consideration.

The population of the southwest, governed

as it is by the peculiar institutions of the states in this region, constitutes the most prominent subject of consideration, and claims the attention of all who would desire to form a just opinion upon the subject of manufactures in this district. The free population of the south may be divided into two classes, the slaveholder and the non-slaveholder. I am not aware that the relative numbers of these two classes have ever been ascertained in any of the states, but I am satisfied that the non-slaveholders far outnumber the slaveholders; perhaps by three to one. In the more southern portion of this region, the non-slaveholders possess, generally, but very small means, and the land which they possess is almost universally poor, and so sterile that a scanty subsistence is all that can be derived from its cultivation; and the more fertile soil, being in the possession of the slaveholder, must ever remain out of the power of those who have none.

This state of things is a great drawback, and bears heavily upon and depresses the moral energies of the poorer classes. Man requires encouragement; the desired end must appear attainable, or he will in time cease to strive for it. So it is with these people; the acquisition of a respectable position in the scale of wealth appears so difficult that they decline the hopeless pursuit, and many of them settle down into habits of idleness, and become the almost passive subjects of all its consequences. And I lament to say that I have observed of late years that an evident deterioration is taking place in this part of the population, the younger portion of it being less educated, less industrious, and in every point of view less respectable than their ancestors.

Such a state of things should not exist in the present age, in such a country as ours. It should be sufficient to challenge the attention and arouse the energies of the philanthropist and the patriot. It is, in an eminent degree, the interest of the slaveholder that a way to wealth and respectability should be opened to this part of the population, and that encouragement should be given to industry and enterprise; and what would be more likely to afford this encouragement than the introduction of manufactures? Diversify the labor and pursuits of the country, and while many will be induced to enter upon these new pursuits, and become industrious, enterprising, and useful citizens, a market will be opened for the produce of the small agriculturist, who will also be stimulated to better his condition; and not many generations will pass away before this portion of the southern population will rival their eastern neighbors in enterprise and industry.

By such a change, the wealth and moral power of the southwest would be increased to an almost indefinite extent, the sources of human comfort would be greatly enlarged,

and the liberal arts—the refinements of man—would abound in the land.

To the slaveholding class of the population of the southwest, the introduction of manufactures is not less interesting than to the non-slaveholding class. The former possess almost all the wealth of the country. The preservation of this wealth is a subject of the highest consideration to those who possess it. Wealth may be divided into two classes, *natural* and *artificial*. The natural wealth of a country consists of the soil, forests, minerals, streams, etc. *Artificial wealth* is that *permanent accumulation of the products of human labor and skill which remains after the immediate and daily wants of the producer are supplied*; and whatever may be the skill and capacity of a community to produce the means of human comfort, this residuum must be regarded as the only true test of its prosperity. Labor, skill, and capacity for producing do not constitute wealth in this sense of the term; they are merely the means of its acquisition. The capacity of producing may be very great, and much labor may be performed, and still an individual or a state may not increase in wealth. Nay, so far from it, examples may be found in our own country of states having become poorer by a steady perseverance in an unwise application of their labor. Such is the case in the Atlantic states south of the Potomac, as I think will be granted by every intelligent and candid individual who is acquainted with the country, and I think it will be admitted that these states are poorer than they were twenty years ago. There is a small increase in the number of laborers, and there may have been something gained in skill; but the great source of all wealth in an agricultural country—the soil—has been greatly deteriorated and diminished, and it may be affirmed without the fear of successful contradiction, that no country, and more especially an agricultural one, can increase in wealth while the soil is becoming more and more exhausted every year, for it is most clear that sooner or later an absolute state of exhaustion must be the result, and no wealth that could be acquired by the sale of those products, the growth of which had caused this state of things, could compensate for the loss of the soil.

Why are not the sandy pine barrens of these states settled and cultivated by a prosperous and intelligent population? It is certainly because the soil will not repay the laborer with bread. And when the once fertile hills and valleys of this region shall have been exhausted by an unwise and improvident system to the same state of sterility as the pine barrens, they likewise will fail to reward the laborer with the means of subsistence, and must be deserted and return to the same state of desolation; a state of desolation the more fearful because it speaks of better days, and forces upon the mind a mournful comparison between the

present and the past, and upon the passer-by, with all their force, the lines of Byron :

"Such is the aspect of this shore ;
"Tis Greece, but living Greece no more."

Although I do not entertain the slightest apprehension that this, the fairest and most delightful region of our continent, will ever be reduced to such a state of desolation, yet it may be safely affirmed that a continuance in the unwise and improvident system hitherto pursued, must in time produce the state of things alluded to.

It is said that evils sometimes cure themselves, and when man pursues a course of folly to the brink of ruin, necessity, sometimes performing the office of reason, warns him of the danger, and compels him to change his course. And if the people of the southwest do not voluntarily abandon their present system of applying all their labor to the production of a few agricultural staples, necessity will in time compel them to do that which the dictates of reason and common sense should long since have taught. This necessity has been operating for many years, but still the people seem resolved to disobey its mandates; for rather than submit to a change, they prefer to abandon the country of their fathers and of their own birth, and seek homes in other lands. This is abundantly proven by the census of the year 1840, whereby it is shown that the increase of the population of the whole United States in the ten preceding years was about thirty-three per cent.; yet the increase in Virginia was but 3.19 per cent.; the increase of North Carolina 2.15 per cent.; and of South Carolina 2.21 per cent. The ratio of Georgia was sustained, but for the reason that within that time a large area of new territory within her limits was being opened for settlement. That necessity must be strong and urgent which induces thirty one per cent. of the population of a state, in the short space of ten years, to break all the social and individual ties that bind man to the place of his birth, and seek his fortunes in other lands. It may be questioned if such an instance of so large a portion of the population of any civilized community has ever been known to emigrate in so short a period. I am aware that the great quantity of new lands which were brought into market in the southwest, operated as a great inducement to emigration, and under the circumstances of the case, constituted the principal inducement. But if the soil in the old states had been properly husbanded, and kept up to its primitive state of productiveness, instead of being reduced to a state of sterility; had manufactures been introduced and established, so as to give employment to the surplus labor that was not required in agriculture, this large

drain could not have taken place. The capital invested in manufactures cannot be readily transferred from one country to another. In most of the leading branches the fixtures constitute a large part of the outlay, and cannot be removed without great loss; hence when capital is once invested in manufacturing, it becomes permanently located, and gives permanency to the population. This view of the subject is sustained by reference to the state of Massachusetts. With a population proverbially enterprising, and much more crowded than that of the southern states; with a soil originally greatly inferior, and a climate decidedly unfriendly to agricultural pursuits, she still shows an increase of twenty-one per cent. in her population, while in the same time Virginia, North Carolina, and South Carolina, only show an increase of about two per cent. And it must also be remembered that within this same space of ten years, a very large quantity of the finest lands in the northwest were brought into market; lands consisting of plains ready for the plough, located near the great thoroughfares of navigation, and a climate suitable to the agricultural habits of the New-Englander. With such temptations and inducements to emigrate, it cannot be doubted but that as large a proportion of the population of Massachusetts would have changed their homes had it not been for the establishment of manufactures in that state. Owing to the establishment and encouragement of manufactures, Massachusetts has retained not only the wealth which has been produced by the labor and skill of her population, but she has kept her population at home, contented and prosperous, while Virginia and the Carolinas have been great losers in both. For when the agriculturist removes, he carries with him almost every thing which he possesses in the form of property, except his land, and that is usually so exhausted that it would not be worth transportation, even if it were as portable as bank notes.

The loss of wealth and population is not the only evil attending this propensity to emigrate,—the moral and social condition of those who remain, as well as those who remove, must ever be disturbed, and more or less retarded in their advancement. This unsettled state of society prevents the establishment and encouragement of any permanent and efficient system of common schools. And here again, by reference to the census of 1840, will be seen how disadvantageously these southern states compare with Massachusetts and other eastern states upon this vital policy. In Massachusetts nearly ninety-nine out of every hundred persons over twenty years of age can read and write; in Virginia but about eighty-two out of every hundred; in North Carolina but about seventy-three out of every hundred; and in South Carolina but about eighty-two

in every hundred adults can read and write.* Such facts as these, one would suppose, were sufficient to arouse the attention of the citizens of the southern states to an inquiry into the cause of their being so far behind the eastern states in regard to education, and the general diffusion of useful knowledge among the poorer classes.

When a spirit of emigration prevails in a country, those who are under its influence cease to feel themselves as individuals identified with the community in which they live; they husband all their resources for the purpose of enabling them to remove and establish new homes; and they will not enter into any schemes for the improvement of either the moral or physical condition of the country which they have resolved to abandon. This influence extends far beyond the number who actually remove, for very many continue to consider their removal as probable, for many years together, who do not eventually emigrate; and thus their moral energies are paralyzed, and the country is deprived of their usefulness. Any change in the pursuits of the country that would allay this spirit of emigration, would constitute the beginning of a new and better state of things.

If manufactures were introduced and encouraged, and the labor of the country sufficiently diversified, so as to give employment to every variety of labor and skill, the population would cease to look for new countries. They would then go to work in earnest to improve both the physical and moral condition of their own. The soil would be improved; more permanent and comfortable habitations would be erected; orchards and gardens would be planted and cultivated; and the country would be redeemed from its present wasted and barren condition. The desire, as well as the means of education would be increased, until there would be no adult freeman found in the land who could not read the constitution of his country. It is a principle in man's nature to regard with partial consideration the things of his own production. He who improves a barren soil to a high state of fertility, feels an interest in it that he could not enjoy by the possession of a soil naturally rich; and he who improves and embellishes his domain by the cultivation of orchards, gardens, and other objects of taste and ornament, derives a pleasure from their use and observation which is unknown to the stranger; these things have been associated with the most cherished objects of his affections, until they have become inseparable; and hence the love of home and of country becomes a sacred principle in the human heart.

* I have calculated these estimates from the tables in the American Almanac for 1843. I cannot answer for their accuracy, as but little reliance can be placed on the census of 1840.

Connected with this subject there is another class of the population of the southwest which claims much consideration. And here I may be permitted to remark, that in my humble opinion the institution of slavery in the United States is destined to produce more extensive results in the improvement and amelioration of the condition of the human family than perhaps any other event that has happened since the Christian era. Africa, sunk into a state of barbarism by reason of the unfriendliness of her climate, could never have been redeemed from her degraded condition in any other way than by transporting her children to some country where they could be brought in contact with civilization, and be made to learn its arts. This may appear to be a harsh mode of redemption, but who that is acquainted with the present moral condition of these people can doubt but the race has been greatly improved by its transportation hither? And though not educated in the schools of literature, they are instructed in most of the substantial arts of civilization; and sufficiently enlightened to understand and appreciate the principles of the Christian religion. There is perhaps no instance of a people in an absolute state of barbarism who have made greater advances towards a state of civilization in the same length of time than have the African race of this country.

Without the agency of slave labor, cotton for exportation would never have been grown to any considerable extent in the United States. It may be even doubted whether it would ever have been of sufficient importance to stimulate the inventive genius of Whitney to the construction of the cotton gin; and the primitive mode of extracting the seed by the fingers might have been handed down to the present generation to enliven the fireside of a winter's evening with a cotton picking frolic.

But with the aid of slave labor, the price of the raw material has been reduced to about one tenth of its former value in the space of half a century; which, in conjunction with the improvement of machinery, has also reduced the price of cotton cloth in an equal ratio; thus putting it in the power of the poor of every country to procure clothing for at least one tenth part of the former prices. If effects could be traced to their true causes, I doubt not but that it would be discovered that the improved condition of the poorer classes in every civilized country was as much indebted to the reduced rates in the price of clothing as to any other one cause whatever. No physical want is so degrading to the human family as the want of clothing; nakedness and rags are the badges of poverty and degradation every where; in this condition man seems to lose all self-respect, and becomes the dependent and passive instru-

ment of him who has courage to use him. But clothe him in comfortable and tasteful raiment, and you impart to him a new spirit; he holds up his head, looks his oppressor in the face, and boldly demands his rights.

It is by the agency of slave labor, also, that the United States have become the second commercial nation of the earth, and by the same agency they are destined ere long to become the first. But before this preëminent position can be attained, a division of this labor must take place, and a portion of it must be directed to manufacturing purposes. The southwest will then as far outstrip every other country in the manufacture of cotton, as she has hitherto done in the growth of the raw material. This is a proposition that does not appear as yet to have been considered by the people of the southwest; but has evidently not escaped the consideration of the people of Great Britain. They foresee that if slave labor should be directed to manufacturing, that our cotton crop would no longer be sent to their mills; and if they should still continue to control the crops of other countries, they could not compete with the slave labor of the southwest; for we could undersell them in every market in the world, not excepting their own home market. Hence the interest which Great Britain and France evinced in relation to the annexation of Texas. It was their policy, and a wise policy on their part, to prevent the people of the United States from extending their territory over the fine cotton region of Texas, and thereby monopolizing much the greater portion of the profitable cotton-growing district of the continent. Hence likewise the policy of England in becoming the champion of liberty in every part of the world; and though covered with the mantle of philanthropy, the disguise is too thin to conceal the true objects of her designs.

Cotton being the great and leading staple of the southwest, the manufacture of the raw material by the labor of this district becomes a subject of the first importance. And the first question is, whether the labor and resources of this region are reasonably adequate to the end proposed. By reference to the census of 1840, it will be seen that the number of slaves then in the United States was about two million five hundred thousand. This population doubles in about twenty-five years; thus in the year 1865 the slave population will be five millions, and in the year 1890 it will reach ten millions. This population cannot emigrate, but must remain within its present limits. Any one acquainted with the country must be satisfied that so great a number of laborers cannot be profitably employed in agriculture, and long before the number reaches ten millions the country will become so exhausted and occupied, that property in slaves must become of

little or no value, unless some other than agricultural employment is found for them.

To one who is acquainted with the southwestern states, it is known that except in the state of Texas, nearly all the good and fertile uplands in the cotton region have been reduced to cultivation; and although there is a large quantity of the poorer uplands, and a considerable quantity of bottom land that may yet be brought into cultivation, yet from the rapid deterioration of the lands now under cultivation, and the necessity of increasing the quantity cultivated in grain to supply the increasing population, it is fair to conclude that the cotton crop east of Texas has nearly reached its maximum; and that three millions of bales might be assigned as the limit. And allowing one and a half million of bales (which is probably too much) for Texas, we shall limit the cotton crop of the United States to four and a half million of bales. Now, according to the most reliable data that I have been able to procure, it would require not exceeding seven hundred thousand laborers to spin and weave four million five hundred thousand bales cotton into plain cloth. The number thus taken from agricultural labor, compared to the number of slaves estimated for the year 1890, bears so small a proportion to the ten millions that it would scarcely be missed out of the field. The white population would afford abundant material for the supply of those branches of the manufactures that require education and skill. Thus it will be seen that in the article of labor the country will afford it in the greatest abundance without at all interfering with other branches of industry; nay, so far from it, by thus drawing off a portion of the labor, the price of slaves will be sustained, and other industrial pursuits will be benefited by sustaining the prices of their products.

Thus, I think it must be admitted on all hands, that the article of labor is now abundant in the southwest; and for the reasons before stated, this abundance must increase more rapidly here than in any other country. And a further reason in favor of this proposition is found in the fact that in every other country a portion of the more prosperous laborers escape from the necessity of laboring, and thus keep down the increase; but every slave is a laborer, and must ever remain so, and so long as this population continues to increase, so long must the number of laborers increase.

Another important consideration connected with this subject is the *price* of labor in the southwest. I have frequently heard it said that manufactures could not succeed in this country, owing to the high price of labor. A female operative in the New-England cotton factories receives from ten to twelve dollars per month; this is more than a female slave

generally hires for in the southwest. But without entering into a comparison of the present nominal price of labor in this and other countries, it is sufficient to say that whatever the price may be, none can produce any given article as cheap with hired labor as he who owns it himself. In the latter case the labor is so much capital in hand, and it is not so much a question with the owner whether he can produce a yard of cloth, or any other given article, as low as it can be produced in England or in Massachusetts, but whether by applying his labor to the production of the cloth, or other article, he can make it more profitable than he can by using it in agriculture. It matters nothing to him how low others can produce the article, he can produce it lower still, so long as it is the best use that he can make of his labor, and so long as his labor is worth keeping. It is upon this principle that the southwest is destined to monopolize the manufacture of the whole cotton crop of the United States. But I have heard it frequently asserted that the slaves were not sufficiently intelligent to make useful and profitable operatives in cotton mills; this is an assumption, as I believe, made by those who possess but little knowledge of the negro character. It is a fact well established that negroes learn blacksmithing, carpentering, boot and shoe-making, and in short all the handicraft trades, with as much facility as white men; and Mr. Deering, of Georgia, has employed slaves in his cotton factory for many years with decided success.

It would no doubt be true that grown negroes taken from the field would be found awkward and clumsy in the labor of the cotton mill; but slaves put into the factories when young, and raised up to that employment, would make the most efficient and reliable operatives that could be found in any country. They would be efficient, because, raised and retained at the same business throughout their lives, they would become most thoroughly capable: they would be more reliable, because they would have no right to prescribe the hours for working; there would be no striking for higher wages; and they would have no right to leave the employment at pleasure, as is the case with free laborers. These would be eminent advantages in favor of those who employ this species of labor.

Another great advantage which this country possesses over all others in reference to the manufacture of cotton, is found in the fact that it possesses the raw material at prime cost: in most cases it would, no doubt, be delivered to the manufacturer at less cost than is now incurred in transporting it to the point of exportation. Thus the cotton would be delivered to the mills in this country for about an average of ten per cent. less than it could be delivered at Lowell, in Massachusetts.

All other things being *equal*, this of itself would be an advantage that no country could work against for a continued series of years.

The southwest would possess also an advantage in the prices of provisions; this would be especially the case in the valley of the Mississippi. It is not at all improbable that the building of cotton mills in various parts of the country would stimulate the smaller farmers to grow provisions sufficient to feed the operatives, thus affording provisions as well as cotton at prime cost. But if this source should fail, the great bread and provision growing region, watered by the Mississippi and its tributaries, could furnish the operatives of the southwest with bread and other provisions at a much less cost than can ever be furnished to the operatives of New-England.

Supposing fuel, water power, and other appliances necessary for carrying on the work, to be equal to other countries, it cannot be doubted by any that the southwest can, if she will, monopolize the manufacture of all the cotton which she will or can produce.

But the people of the southwest should not, nor will they be satisfied with a monopoly of the article of cotton. This region offers immense facilities for the rearing of sheep; there are large districts of country in the south that have hitherto been considered as useless, by reason of their sterility—these are admirably adapted to sheep husbandry. They are generally the most healthy parts of the country, and if encouragement were given to wool growing, the non-slaveholding part of the population would be furnished with a most pleasant and profitable pursuit. The lands would cost little or nothing, and with almost no means at all, any individual could in a few years get up a respectable flock. This would enlarge the capacity of the country to sustain its increasing population, and keep within its limits a physical and moral power necessary for the preservation of the peculiar institutions of the south—a policy that should never be lost sight of by the slaveholder. But an inducement must be afforded before these non-slaveholders can be persuaded to embark in this—to them—new pursuit. They are a class of men who possess but little enterprise or foresight; they are not over-fond of labor, and must be well convinced that they will be rewarded before they will agree to work.

The subject is one of sufficient importance to engage the attention of the Legislatures of the states, and if no better mode could be suggested, we would submit the proposition of giving a bounty upon wool sufficient to stimulate its production. This, aided by a demand that would be created by the establishment of manufactures in the interior of the country, would give an impulse to this great branch of industry; one, in whatever light it may be considered, of the utmost importance to the country. This is a business that must neces-

merely have a small beginning, but sheep are of rapid growth and increase, and with proper encouragement, the growth and manufacture of wool would constitute a large item in the wealth and commerce of the country. It would very soon begin to stop the great drain upon us for coarse woollens and blankets for negro clothing. These articles would be made with a view to the particular uses for which they were designed, and would therefore be better than those obtained from abroad.

The benefits to be derived by the non-slaveholding part of the population, would perhaps be of more importance than any other. By opening to them a profitable employment, you give them the means of procuring wealth and moral respectability, and thereby raise up in the heart of the country a population which will be the pride and boast of the nation. Instead of emigrating out of your borders, they will remain the physical and moral bulwark of southern institutions.

The same causes that favor the manufacture of cotton, will bear upon the article of wool; but the south can never acquire the same monopoly in this as in the article of cotton. If, however, this district should prosecute the growing of wool to the extent of its capacity, and should only manufacture to the extent of its growth, the business would become of great importance, and would add much wealth to the community.

Iron is an article that abounds in many parts of the southwest, and is destined to constitute one of its great staples. Slave labor is peculiarly adapted to the production and manufacture of this article. The demand for iron is daily increasing throughout the civilized world, but in no part perhaps more than in the United States. It may be assumed that the system of internal improvements, by means of railways, will be adopted throughout the entire country; the demand for this object alone will be large, almost beyond calculation. The introduction of cotton, woollen, and other manufactures, will also greatly increase the demand for iron. Add to these the increasing demand incident to the growth of the west for agricultural and other purposes, and it will be perceived that the production and manufacture of iron is scarcely inferior to any other branch of industry, and it should be the policy of the south, without delay, to use every reasonable means for the encouragement and development of this great source of wealth.

Cotton, wool, and iron may be regarded as the three great staples of the southwest. But there is so close a relation between these and many other branches of manufactures, that the establishment of any one or more of them upon an extensive scale would draw after them others, perhaps, not thought of in the beginning; thus not only affording employment to all the labor of the country, but imparting

value to all the natural products of the land. The minerals, the streams, and the forests, would all be found to be the great sources of wealth, and the possessor of many a barren spot would be surprised at his good fortune. But of all the classes to be benefited by such a change, the agriculturist would come in for the largest share, and it is for them and their interests that these important changes are proposed. The country and its destiny is in their hands; they have at their disposal more ample means of producing wealth, and for the promotion of human comfort, than has ever been bestowed upon any other land or people. They have reached an important crisis in their own history, and it would be prudent that they should take a retrospective view of the past, and examine their present condition, for the purpose of enabling them to form a just estimate of the future.

In looking into the history of the south and southwest since the earliest settlement, we find that the almost entire labor of the country has been applied to agriculture, and that the surplus products have been, up to within a few years past, almost entirely shipped to foreign markets. The country seems to have labored under the impression that wealth could be acquired only by drawing it from other countries. Acting upon this principle, they have gone on from year to year producing cotton, tobacco, and grain for exportation, until their best lands have become exhausted, and they find themselves as poor in all the appliances of comfort as they were many years past. The price of the crops being returned to the country in articles of daily consumption, the proceeds of each year's crop is consumed without leaving any thing to be added to the wealth of the community; and the only increase to be found in the elements or means to procure wealth, consists of the increase of slaves—an increase in no way connected with the exportation of produce, but would have been the same, or in all probability greater, if all the produce had been consumed at home.

If one unacquainted with the present condition of the southwest, were told that the cotton-growing district alone had sold the crop for fifty millions of dollars per annum for the last twenty years, he would naturally conclude that this must be the richest community in the world. He might well imagine that the planters all dwell in palaces, upon estates improved by every device of art, and that their most common utensils were made of the precious metals; that canals, turnpikes, railways, and every other improvement designed either for use or for ornament, abounded in every part of the land; and that the want of money had never been felt or heard of in its limits. He would conclude that the most splendid edifices dedicated to the purposes of religion and learning were every where to be

found, and that all the liberal arts had here found their reward and a home. But what would be his surprise when told, that so far from dwelling in palaces, many of these planters dwell in habitations of the most primitive construction, and these so inartificially built as to be incapable of protecting the inmates from the winds and rains of heaven; that instead of any artistical improvement, this rude dwelling was surrounded by cotton fields, or probably by fields exhausted, washed into gullies, and abandoned; that instead of canals, the navigable streams remain unimproved, to the great detriment of transportation; that the common roads of the country were scarcely passable; that the edifices erected for the accommodation of learning and religion were frequently built of logs, and covered with boards; and that the fine arts were but little encouraged or cared for. Upon receiving this information, he would imagine that this was surely the country of misers—that they had been hoarding up all the money of the world, to the great detriment of the balance of mankind. But his surprise would be greatly increased when informed, that instead of being misers and hoarders of money, these people were generally scarce of it, and many of them embarrassed and bankrupt. Upon what principle could a stranger to the country account for this condition of things? How could he account for the expenditure of the enormous sum of *one billion of dollars* in the short space of twenty years? Indeed, I think it would puzzle the most observing individual in the country to account for so strange a result.

It is true that much has been paid for public lands within this period of twenty years, but the price of two crops would more than cover that account. The purchase of slaves and private lands should not be taken into the account, because the money paid for these should have remained in the country, except that portion paid for the slaves purchased out of the cotton region, which is inconsiderable when compared to the number brought into it by emigrants; and as to the natural increase of the slaves in the cotton region, that has no relation to the subject.

What, then, has become of the other nine hundred millions of dollars? Much of it has been paid to the neighboring states for provisions, mules, horses, and implements of husbandry; much has been paid for clothing and other articles of manufacture, all induced by the system of applying *all*, or nearly all the labor of the country to the production of one staple only, and by neglecting the encouragement of manufactures. No mind can look back upon the history of this region for the last twenty years, and not feel convinced that the labor bestowed in cotton growing during that period has been a total loss to this part of the country. It is true that some of the

neighboring states have been benefited to some extent, and it has served to swell the general commerce of the nation; the manufacture of the raw material has given employment to foreign capital and to foreign labor, and has also served to swell the volume of foreign commerce. But the country of its production has gained nothing, and lost much;—it has lost much because it has not kept its relative position in the rapid march of improvement which marks the progress of other countries; and more than all, in the transportation of its *produce*, it has transported much of the productive and essential principles of the soil, which can never be returned, thereby sapping the very foundation of its wealth.

No country has ever acquired permanent wealth by exporting its unmanufactured products; and if any such case could be found in history, the experience of the southwest would furnish satisfactory testimony that the exportation of the commodities produced here, tends rather to impoverish than enrich the country. With the experience and the lights of the past before them, it would seem to be madness to persevere in a course so detrimental to their interests. If, when the prices of the leading staples were much better than they are likely to be for the future, and when the lands were more fertile and productive than now, this system proved unprofitable and ruinous, what hope is there that the result of the future will be better? Nay, is it not quite certain that each succeeding year will accelerate the progressive deterioration, until a state of irredeemable ruin will ensue!

The time has arrived when this subject should be brought to the consideration of every individual in the country, and all the facts bearing upon it should be collected and stated with fidelity. If the legislatures will not move in this work, let societies be formed for the purpose of collecting facts, and collating them for public use. Let a survey and census be taken of some of the older states, showing the quantity of land now in cultivation, compared to the quantity cultivated of some given period that has passed; the quantity of land that has been cultivated, and now abandoned by reason of its exhaustion; the comparative productiveness of the soil now in cultivation, with the soil formerly cultivated; also the quantity of productive soil not cleared and brought into cultivation, and the capacity of the state to increase its productions, either of cotton or grain.

Let it be shown also what number of the inhabitants are non-slaveholders, and the prospects of this class in regard to their future condition in the country. Let facts be also collected in regard to the minerals, forests, water power, and the number of laborers that might be spared from the field without detriment to the agricultural pursuits. Add to this all proper facts connected with the cost

of erecting buildings, and the purchase of machinery for manufacturing both cotton and wool. Let the number of hands and the cost necessary to produce any given quantity of fabric be ascertained; and cause the whole, when properly and fairly digested, to be published in the most popular form, that they may be read by the whole community. Such a collection of facts would afford more light upon the subject of political economy than all the books that have been written upon the subject, from the time of Adam Smith to the present day.

To the foregoing might be added another class of facts, that would go far to explain what has become of a large portion of the money that has been earned by the labor of the south and southwest—I mean those facts connected with the transportation of the raw material to a market, and the amount of the manufactures composed of that raw material, that has been returned to and consumed by the producer. This is a branch of the subject that should be carefully inquired into, and stated in terms that could be understood by all. It should be separated, if possible, from all political considerations, so that the mind of every individual may be free to act on it without prejudice. It is a self-evident proposition, that the transportation of an article adds nothing to its intrinsic value. Its volume, quality, and properties remain the same as they were before the act of transportation. A barrel of flour or pork transported from New-Orleans to Liverpool contains no more nutriment, nor can it contribute more to the support of human life and comfort in Liverpool than in New-Orleans. Now it will be perceived, that if this flour and pork should be consumed in Liverpool by one who is employed in the manufacture of cotton cloth, and this cloth should be sent to this country to be consumed by the cotton grower, and the cloth could have been manufactured here with the same amount of labor as at Liverpool; then the whole of the time, labor, and capital employed in the transportation of the cotton, flour, and pork to Liverpool, and the re-shipment of the cloth to this country, is a clear loss, at least to the United States.

The only objection that can be raised to this proposition is predicated upon the assumption that the labor employed in the manufacture of cloth in this country might have been more profitably employed in agriculture. So far from this being the case, however, the interest of the agriculturist would be promoted by withdrawing this labor from the field, and to that extent keeping down the over-production of the raw material. The capital, skill, and labor employed in this transaction, are not only lost to this country but to the whole human family; for as it has been shown that nothing has been produced by the operation, the volume of those

things necessary to human comfort has in no way been increased. In making this assertion, we do not forget that those employed in this transportation have been supported by their labor, but this does not alter the case; for as their labors were unproductive, it would have been the same to the balance of the world if they had raised the amount by contribution from the producer and consumer of the articles transported. This is the great evil under which the southwest labors. She is yearly wearing out her soil in the production of one great staple, which has become ruinously low in price by reason of its great supply. She parts with this staple at prime cost, and purchases almost all her necessary appliances of comfort from abroad, not at prime cost, but burdened with the profits of merchants, the costs of transportation, duties, commissions, exchange, and numerous other charges, all of which go to support and enrich others at her expense. This is the true reason that she is growing poorer while the rest of the world is growing rich, for it is easy for the world to enrich itself from such a customer on such terms.

If she were wise, she would cease to carry on a traffic in which she always has been and always must be a loser; she will set up for herself, and instead of parting with the products of all her labor to support the balance of the world, she will manufacture her own clothing, and, not stopping at this, proceed to manufacture the whole of her crop, and thereby draw upon the world for a portion of her former losses.

If the proper statistical information could be obtained, we have no doubt but it would be found that the capital and labor expended by the southwest in the transportation of its cotton, and the return of the manufactured article for consumption within the last twenty years, would amount to a sum sufficient to erect buildings, purchase machinery, and put into successful operation a sufficient number of cotton mills to manufacture all the cotton that she grows.

Supposing the south should be convinced that she has hitherto pursued an erroneous and ruinous policy, and resolves to change, an important inquiry then arises in regard to the source from which the means can be obtained to enable her to introduce in a reasonable time the contemplated reform. Upon this head it may be observed that a change in the policy of a country which involves so many important and vital considerations should be introduced gradually, so as to prevent sudden revulsions from taking place in the long established pursuits of the community. The beginning should be small, so as to prevent the outlay of too much capital at a time when it would be difficult to procure the requisite number of skilful operatives to make the investment profit-

able. But notwithstanding the change should be gradual, yet a well-digested system of increase and enlargement should be adopted in the beginning, and never departed from.

Let such planters as are desirous of the introduction of manufactures, instead of investing the net income of their crops in land and slaves, appropriate it to the purposes of manufacturing, and, by uniting the surplus means of a number together, an association might be formed with sufficient means to commence the work in every important district in a very short time. Instead of sending their young slaves to the field, send them to the cotton mill to be instructed as operatives. If such a course were adopted and adhered to, every year would add accelerated strength to the enterprise. The manufacturing establishments would soon begin to support themselves. Every year would bring an increase of operatives to the mills, and by adhering to a system like this, a few years would insensibly produce a change that would astonish mankind, and this, too, without lessening the agricultural products of the country, or doing violence to any of the established pursuits of the community. By adopting a course like this, the whole scheme could be carried out upon the means and resources of the southwest, the establishments would go into operation free from debt and incumbrance, and all the profits would belong to the country, free from the demands of foreign capitalists. Two hands employed in the mills could spin and weave the cotton produced by three; this would add about two hundred per cent. to its value, which would be a clear gain to the country. I assume it to be a clear gain, for the reason that I believe in a few years the cotton crop, in its raw state, would bring as much money to the planters and the country at large as it would have done providing this system had not been introduced. It would, in time, be the means of affording a home market for all the cotton produced: this would make the market price more permanent and satisfactory, for the reason that the price would not depend upon and be influenced by so many contingencies as at present. The character of the crop, and the amount of stock on hand, could always be estimated. This would, to a great extent, prevent the spirit of speculation, which has so often prevailed in regard to the article of cotton, and which has ever been attended with most disastrous consequences. In a word, we should control the cotton trade of the world, and would have it in our power to establish the prices at rates that would always be remunerating to the producer of both the raw material and the manufactured article.

In contemplating the results of these propositions, they appear more like air-built castles than substantial effects flowing from or

produced by adequate causes. But at the risk of being pronounced a dreamer, we will take a glance at some of the results which may reasonably be expected from the introduction of manufactures into the southwest. And first of all, the value of the cotton, in case it should all be manufactured in the country, will be increased at least two hundred per cent.; and instead of fifty millions of dollars, we shall produce annually one hundred and fifty millions; and if the crop should ever reach four and a half millions of bales, and the prices of the raw material and the manufactured articles should range as at present, the annual produce would amount to the enormous sum of three hundred millions of dollars per annum. Thus the article of cotton alone, to say nothing of other productions, would, to use a figurative expression, establish the centre of gravity for the commercial world in the southwest.

Instead of being drained of her substance by every other people, the current would be reversed, and wealth would flow into her coffers from all the nations of the earth; then, indeed, her planters might dwell in castles, upon estates improved and embellished by every device of art; the exhausted and abandoned fields would be reclaimed and redeemed from sterility; her swamps would be drained, and her rivers confined within their banks, with great advantage to the health of the country; the facilities of travelling and transportation would be improved and enlarged to an extent commensurate with the utmost demand; and the south and southwest would become, what by nature and the aid of art they are destined to be, the richest and fairest portion of the whole earth. But the benefits of such a change will not be confined to the southwest; every other part of the country would participate in her prosperity, and more especially the west and northwest. This mighty region, which will ere long number fifty millions of human beings, must be most intimately connected with the southwest, whether in prosperity or adversity. The southwest is the legitimate market for the bread, provisions, and stock of this region. The northwest could be supplied at cheaper rates with all the articles of manufactures produced in the southwest, than she could be from either New-England or any foreign market; for this one reason, if no other, that the transportation would be cheaper, and for the further reason that, by purchasing in the market where she sold her own produce, much would be saved in the way of exchange and commissions.

It may be asked, where could a market be found for the enormous quantity of fabrics to be produced from four million five hundred thousand bales of cotton? By reference to the ratio of the increase of population in the

United States, it will be found that our population doubles in about twenty-four years; and, assuming that we have twenty millions now, our population will amount to eighty millions in the year 1896, a period that will arrive within the lifetime of many men who are now thirty years of age. This increase of population will be quite equal to the increase in the growth of cotton; and we shall continue to have perhaps about the same quantity for exportation to foreign countries that we export at present; but this quantity being greatly increased in value by being manufactured, our external commerce in this article will be more than doubled, while our internal commerce will be enlarged almost beyond human conception; for the closest investigation cannot at present discover the many new sources of commerce which will from time to time develop themselves in a country so new and so extensive as the United States, and especially the great western division.

In every point of view (save that it affords no revenue to the government) the internal commerce of the country is vastly more important than the external or foreign commerce. The capital, labor, and skill employed in the transportation belongs to the country, and constitutes a portion of its wealth; and the profits derived from the transportation, as well as the commissions and profits of the dealers in this commerce, all go to the support of our own citizens. By establishing manufactures in the country, a market will be afforded for many articles, which from their perishable nature, or owing to their great weight or bulk compared to their value, cannot become the objects of a foreign or distant commerce. Many articles of this class would be found profitable to the producer, and highly convenient and useful to the consumer. But at present, for want of a demand, this source of employment, comfort, and wealth is lost to the country.

In this class of products may be mentioned the products of the forest, summer fruits, hay, potatoes, and many other articles produced at a considerable distance from towns and navigable streams. Every manufacturing establishment would open a new market, and become the centre of a commercial circle; and by changing these perishable and heavy articles by the process of consumption and reproduction into a more permanent and valuable form, they would be made suitable to enter into a more distant commerce. And thus employment would be given to labor, and all the means of comfort and of wealth would be produced in districts hitherto lying waste and unproductive. In a government like ours in form, extending over so large a country, a country so strongly marked and divided by its physical conformation and diversity of climate, it is of great importance

that every encouragement should be given to internal commerce. By promoting this great interest, the local and provincial prejudices always so liable to grow up between districts having but little intercourse are prevented. Each portion of the country will be made to feel its dependence upon the other, a community of interest will be established, and a general sympathy pervade the whole nation as one family. Thus our political institutions will be greatly strengthened, and many of the causes which have hitherto disturbed the harmony of the country will cease. Our population will become more Americanized. In throwing off our dependence upon other countries for the supply of our physical wants, we shall become more independent in our manners and modes of thinking, and the same great causes, which give us the control of the commerce of the world, will enable us to impress upon other nations our manners and customs. The spirit and philosophy of our political institutions will follow our commerce wherever it prevails; and more than all, under the guidance of Providence, we shall, through the agency of our supremacy in foreign commerce, do much to establish the Christian religion throughout the earth.

Possessing a territory extending from the Atlantic to the Pacific, with Europe and Africa on the east and southeast, and Asia and Australia on the west and southwest, and our coasting trade from east to west, passing all around South America, we occupy a position upon the globe which plainly indicates our superior advantages over all other nations of the earth. But these advantages must be cultivated and improved, or they will not be available in giving to our country that proud pre-eminence over all others that she is capable of attaining. The first step towards the attainment of this object is the encouragement of manufactures, by which means we shall not only render ourselves independent of all other countries for the supply of most of our wants, but we shall soon begin to afford large supplies to other nations. In using the term *encouragement*, I have no reference to that kind of encouragement which may be given by the acts of the general government by a protective tariff; that branch of the subject belongs to the statesman, and with him I desire to leave it. But I mean that kind of encouragement which it is in the power of the people to give, simply by a division of labor. This is the great principle which lies at the foundation of the whole subject. Experience shows that every agricultural product that can be successfully produced in the United States can be increased far beyond the demand; this, in time, reduces the prices so low that it checks the production, and the demand for labor being also checked, much labor is thrown out of employment; and it has been the case for many

years that there has been an over-production of all the leading staples at the same time, leaving in the country very many individuals without adequate and constant employment. This is a great evil; it is not only a source of individual suffering, but greatly endangers the safety and morals of society.

From my own observation, I am satisfied that within the scope of my acquaintance, I have perceived more unhappiness arising from the want of constant and profitable employment, for five years past, than from all other causes put together. If the pursuits of the country were sufficiently diversified, this evil would be removed. It is not in the power of the laborer who is out of employment to introduce new pursuits; he is destitute of the means to enable him to do so. But when it is discovered in any district of country that from over-production the leading pursuits fail to remunerate the labor engaged in them, some other pursuit should be introduced to an extent that would relieve the established pursuits from over-production. This could be effected throughout the country by the formation of agricultural societies in every county, whose duty it should be to collect all proper information connected with the labor and products of the country; and whenever it was ascertained that any pursuit was becoming unprofitable by over-production, or other causes, it should be their further duty to procure information in regard to a substitute, and when a substitute should be selected and adopted, the means should be raised to aid in its introduction. In this way a great variety of employments would in time be established, greatly to the benefit and advantage of the whole community. By this means many new sources of employment and wealth would be discovered and developed, and more permanency would be imparted to the standard value of the old-established pursuits; and revulsions would consequently become less frequent.

Such is the nature of the *encouragement* required for the introduction of manufactures and a division of labor; it is that kind of encouragement which is derived from the sympathy and countenance of society; for without this encouragement, nothing short of great capital and indomitable industry and perseverance will secure success to any new enterprise. The community must first be enlightened upon the subject; the public mind must be convinced by facts and arguments, and old prejudices removed, before it can be brought to sympathize with any scheme which proposes a change in the established pursuits of the community. There is a spirit of conservatism in business, as well as in morals and politics, which is ever upon the watch, and prompt to condemn every innovation; and woe to him against whose projects these conservatism's prophecy! They have much pride

of opinion, and if they predict a failure, they will labor to sustain their judgment by every means short of violence. Success would implicate their judgment and foresight, and consequently they have something at risk; they denominate the innovator a castle-builder wanting in judgment, and pronounce his schemes visionary and impracticable. By such practices the unfortunate projector is brought into disrepute; he loses the confidence of the community, and without great pecuniary and moral resources he must fail; and with his failure the cause in which he engages is injured.

Let it not be said that prophecy has ceased. There are many prophets in the land, whose predictions a wise man will not disregard; for they prophesy evil, and set themselves at work to produce the result. Hence the importance of preparing the way for the introduction of manufactures by enlightening the public mind by every practicable means. The public prints are not sufficient; the living minds of the people must be brought to act upon each other by and through the agency of associations; and without this no sympathy can be diffused among them upon this great subject, and no concert of action can be effected.

Before the public mind can be prepared for the encouragement of manufactures in the southwest, it must be taught a new system of private and political economy. Under the present system the opinion generally prevails that nothing but money constitutes wealth; and many seem to suppose that the best test of prosperity is indicated by the gross sum for which the crop is sold, with but little reference to the cost of its production. In all my acquaintance, I have met with very few planters who estimated the depreciation of their soil as any thing in the cost of producing a crop, notwithstanding they were every few years compelled to purchase land to supply the place of that which they had worn out. Those who act upon this system rarely ever do any thing to improve their land; are unwilling to appropriate sufficient labor to the production of a sufficient supply of grain and provisions; and never doubt the proposition that if they can buy an article cheaper than they can make it, that it would be great folly to produce it themselves. This proposition appears plausible in theory, and might be true perhaps, if the true cost of producing the article could be correctly calculated; as well as the inconvenience of procuring a supply from abroad, and the detriment to business arising from the want of an abundant and constant supply, with many other considerations which are rarely brought into the estimate. But however plausible the theory may appear, it is quite certain that it is deceptive and unsound; or the calculations of the cost of producing, and purchasing the sup-

ply, are not correctly made. For, except in some peculiar locations, and under peculiar circumstances, experience has proven that the system is almost universally ruinous in practice. This is a strong illustration of the necessity of a division of labor, even upon a single plantation. For the application of all the labor of the plantation to the production of one staple, is a violation of this principle, which seems to be a law of nature governing all her works.

The variety of soil, of climate, of mountain and plain, and in fine the great variety of human capacity and of human wants, all indicate the observance of this principle. And when civilized man shall cease to observe it, he must return to his primitive state of barbarism; and even then he cannot exist without in some degree conforming his pursuits to this principle. Labor is man's destiny upon earth; none can escape from it in some form or other; nor have they the moral right to do so. Neither have any part of the human family the natural right to appropriate to themselves more than their share, to the exclusion of others.

By a law of man's nature, a certain amount of bodily exercise is made necessary to the development of his faculties, and the enjoyment and preservation of health. This exercise was not intended to be wasted in unprofitable pursuits; but was designed to be appropriated to the production of things useful to human comfort, and to the improvement of man's condition. It is only by such an appropriation that civilized man has emerged from a state of barbarism; and by such means only can a state of civilization be sustained; for when that requisite quantum of human exercise which is necessary to sustain health, shall be wasted or thrown away upon unprofitable objects, the advance of civilization must not only be checked, but it must suffer decay, in a ratio commensurate with the waste and misapplication of human exercise. Although man was undoubtedly designed and constituted for a state of civilization, it is nevertheless an artificial state, and must be governed by human laws; and among other civil rights, it is most clear that the laborer should be protected in the enjoyment of his honest acquisitions.

It is also clear that for the purpose of defining and securing civil rights, that the natural wealth, consisting of the soil, the forests, minerals, &c., should be appropriated, and become the objects of individual property and control. By keeping these propositions in view, we must perceive that in time, as the population of a country increases, and new generations spring up, a portion of the people must be destitute of either natural or artificial wealth, and are necessarily dependent on those who possess the wealth of the country for employment and support. Now, if we sup-

pose that all the established and known peasants of the country are fully supplied with labor, and no more can be admitted without endangering the means of existence to those already employed, then that portion of the population who are so unfortunate as to be out of employment, must starve or emigrate; and thus a limit would be fixed to the increase of population. This is not a mere hypothesis, for history affords many instances in point. This result can be prevented as long as new pursuits can be introduced that will reward the laborer with the means of subsistence. If, in such a case, a part of the corn produced was sent to another country to buy clothing, and this clothing could be made by the surplus and unemployed laborers at home, it is quite plain that such a change would afford relief to the extent of the corn thus retained in the country. Or, if a country in such a condition procured corn from abroad by the exchange of its manufactures, which were produced to the full extent of the demand, if some other article of manufacture could be produced, which could be exchanged for corn, this would likewise afford relief to the extent which such manufacture could be exchanged. In this case it will be perceived that the principle upon which the relief is founded, is the withdrawing of the employment of foreign labor, and increasing the demand at home by the introduction of new pursuits. By thus dividing the labor of a community, and diversifying the pursuits, provision may be made for an almost indefinite amount of population. And the conclusion naturally follows, that the more divided and diversified the pursuits, the more diversified will be the intelligence of a community; for every new pursuit brings with it the science or knowledge connected with it, thus redeeming the laboring classes from ignorance, as well as from poverty.

This is an important consideration in a government like ours, which is founded upon the intelligence and virtue of the people; these constitute not only the basis, but the superstructure also; these are improvable qualifications; and with proper culture and encouragement may be perpetuated throughout all time, and so long may our free institutions abide. But suffer these to fall into decay, and the republican government of the United States must cease to exist, except in history, where it will be pointed out as a splendid failure in an effort made by a few philanthropists to redeem man from ignorance and tyranny.

The foregoing views have been more particularly applied to the Atlantic and Gulf states, which may be denominated the cotton region; but in their general application, they are intended for the whole of the slaveholding district of the Union. Kentucky, Tennessee, Arkansas and Missouri may be denominated

the provision and iron region of the southwest. From the character of their climate and soil, their agricultural pursuits are more varied; they cannot be said to have any decided and fixed staple, except in some small districts, and consequently as their population increases, they will more naturally diversify their pursuits. Situated between the south and the north, their location is a most happy one for the distribution of their great leading products; and when our population shall reach eighty or a hundred millions, as it must before the present generation shall all have passed away, the middle states will become the richest and most interesting portion of the Union; the great internal commerce of the Union will find its centre here, and cities and markets will be established, equalling, and perhaps surpassing, those situated upon the sea-coast. Besides the article of provisions, this region will be able to produce and manufacture the articles of iron, hemp and tobacco cheaper than they can be any where else produced; and by reason of advantage of location, these articles can be distributed in every direction as from a common centre, with less cost of transportation to the consumer. Here likewise will centre the arts and refinements of civilization, which will give the distinctive tone and coloring to the American character. Such predictions may appear rash to many, but before they are condemned as visionary and false, I respectfully invite an attentive examination of the map of the United States, with a careful inquiry into the natural resources of each and every state and territory east of the Rocky Mountains. After such an examination, let it be imagined that the valley of the Mississippi, including Texas, contains a population of one hundred millions, and that two fifths of this population is situated west of the Mississippi river, and I think it will be admitted that the eastern cities can no longer control the commerce and finances of this mighty region; and this is a state of things not so remote but that many now living may realize it, for in seventy years from this time, if our population should continue to increase at a ratio equal to the seventy years past, it will reach over one hundred and fifty millions. Such is the destiny that awaits the southwest, if her population should have the foresight and wisdom to improve the means that nature and her peculiar institutions have placed in her power. But if she blindly adheres to her old system of applying all her labor to the production of but one, or a few articles, thereby exhausting her natural wealth and receiving nothing that is substantial and permanent in its stead, she must lose all the advantages of her position and of her vast resources, and the eastern states must continue to increase their manufactures until they shall monopolize both the raw material and the fabric. And thus, the absurd

system of transporting the raw material to a great distance, at a great expense, to get it manufactured, will be perpetuated. And a bushel of corn grown in the west for ten cents, must continue to be sent to the east at the cost of from thirty to forty cents, to feed the operatives; and after giving employment to the eastern population, and paying a large profit on eastern capital, and to eastern merchants, the manufactured article will be returned to the west, charged with transportation and other expenses, to be consumed and paid for in part with corn at ten cents per bushel, and other western produce at corresponding prices. The whole process is so absurd and preposterous when fairly stated, that we can scarcely believe in its present existence, although the whole country is engaged in carrying it on every day.

There is another consideration connected with the perpetuation of this system. As the lands become more and more exhausted in the older and more northern parts of the slaveholding districts, slave labor will become less and less valuable; it will therefore press south and southwest, and their places will be filled by white laborers, thus insensibly narrowing the limits of the slave district, until the whole of this population will be crowded into a comparatively small area in the extreme south. This result of all others should be avoided if possible by the slaveholders; for it would in every way tend to lessen the value of their property, and would sooner or later verify the prediction of the eccentric statesman of Roanoke, that instead of the slaves running away from the master, the master would run away from his slaves. As the country fills up with a more crowded population in the non-slaveholding states, free labor by degrees will press upon the northern limits of the slaveholding states, and gain a footing within its borders. This will be a different race from the southern non-slaveholder; these will be people who are inured to habits of industry and enterprise; they will bring the means to purchase the worn-out fields, and they will go to work to restore them to fertility by their own industry and skill; they will not use slave labor, and all the land thus purchased and occupied will be so much taken from the occupation of slaves; for it may be safely assumed that when the slaves have once progressed south, they will never return to the north again.

This process has already commenced, and some of the northern counties of Virginia are beginning to attract the attention of their northern neighbors, whose settlement here will no doubt be beneficial to this particular district. But if this emigration should become considerable, it must in time greatly affect the value of slave property in the south.

Thus I have endeavored to suggest to the

public mind such arguments as have occurred to me upon this important subject. I have endeavored to show, that the agricultural system hitherto pursued in the south and southwest has proved ruinous to the country by exhausting the soil, and thereby rendering it every year less and less capable of producing the appliances of human want and human comfort; and that it has a tendency to divide the population into two classes, widely differing from each other in many important respects; that to these and other causes must be assigned the reason of the small increase of the population of the older southern states for the ten years preceding the year 1840, and the great want of education among the poorer classes. On the other hand, I have endeavored to show some of the effects which may be expected from the introduction of manufactures into the southwest; among which I have supposed that the moral condition of the people would be improved, and that by diversifying the employments of the country, the means of human comfort would be greatly increased, and that all classes of the population would share in these benefits; that the value of the exports would be greatly enlarged by the process of manufacturing, and that, instead of a constant drain from the country of the products of all its labor and soil, that wealth would flow into it from every part of the world. I have called the attention of the south and southwest to the rapid increase of labor in this region, and the necessity of finding profitable employment for it; and have taken the liberty of suggesting a plan of introducing manufactures by degrees, as well for the purpose of preventing a shock to the established pursuits of the country, as to avoid the creation of a state of indebtedness. These, with various other topics, I have desired to impress upon the mind of the people of the southwest. Many of these topics are no doubt familiar to many, nor could they be otherwise to those who reside in the country; but we sometimes become familiarized with evils until we cease to observe them, and in such cases a friendly suggestion may be useful. My principal object in this essay has been to arrest the attention of the people of the southwest, and to invite them to the consideration of a subject intimately connected with their prosperity. My conclusions may not in every instance be correct, and although they would seem to be fair deductions from the facts stated, yet the unforeseen events and changes which time alone can reveal, may produce results very different from those which I have supposed. Be this as it may, the amelioration of the condition of the human family is among the great duties of man, and to promote this object we are called to act upon the lights before us; we are not permitted to penetrate the future, and to predict with certainty the result of

any human policy. Nevertheless, it is our duty to march onward, guided by the lights of reason and experience, trusting the events to an overruling Providence.

If this humble effort should in any way be the means of directing the attention of the people of the southwest to the subject of manufacturing, and of inducing them to examine the several topics which I have endeavored to present for their consideration, I trust that individuals possessing more capacity, as well as more time and means for procuring correct information, will take the matter in hand, and afford to the country the benefit of their talents and observation. It will be in the power of such individuals to confer a lasting benefit upon the country, and place their names among those of its benefactors.

MANUFACTURES—INFLUENCE OF ON THE GROWTH OF CITIES.—CANNELTON, INDIANA.—We are indebted to Hamilton Smith, Esq., the distinguished manufacturer of the West, and the man who is doing more at this moment for advancing the manufacturing and general prosperity of this great region than perhaps any other in the nation, for a copy of his elaborate pamphlet, prepared by request, upon the mineral, coal, and manufacturing facilities of Cannelton, Indiana. We have examined it with much interest, as many of the particulars included have from time to time been presented by the author through our Review, and as there are many more which are deserving of the widest circulation and study. The attention of capitalists in particular should be directed to this quarter, which promises them the most prolific returns. Extensive cotton factories are in construction, and the coal mines are in control of a company who solicit capital. The great mill of which a wood-cut representation is given in the pamphlet is intended for 10,800 spindles and 872 looms; it is 287 feet long and 65 feet wide; towers 106 feet high. The attic (220 feet by 40 feet) is lighted by windows in the gable-ends. Corner-stone laid May 21, 1849.

"This town was laid out in 1835, and settled by colliers under the supervision of Rhodes and McLane. In 1836 the American Cannel Coal Company was formed, which owes its origin to the late General Seth Hunt, of New Hampshire; a man whose intelligence was only equalled by the energy of his character, and who, in connection with Messrs. Hobart, Williams and Russell, then wealthy capitalists of Boston, purchased a large tract of land, consisting of about 7,000 acres, and made several entries to the coal strata. The capital stock of this company is \$500,000. From 400,000 to 500,000 bushels of coal are mined here per annum. The site of this town is on a bend of the Ohio, and embraces over

1,000 acres between the river and the coal hills. The landing is very fine. The principal improvements and growth of Cannelton have taken place within the last twelve months. Its population is now somewhere between 1,200 and 1,500 persons.

"A large first class hotel, containing over 70 sleeping-rooms, is now being constructed, and will be ready for occupation by the last of May. Besides the saw and grist-mill of J. C. Porter & Co., referred to on the map, the cotton-mill company have already in operation a fine steam planing-mill, and, connected with the same power, several circular saws, turning-lathes, etc. The establishment of Mr. Z. W. Merrithew, for the manufacture of shaved shingles, is also worthy of notice. A short distance above Castletbury Creek, and upon the bank of the river, Messrs. Ross, Talbott & Co. are erecting a large saw and flouring-mill. Just below the mouth of Dixie Creek Mr. Thomas M. Smith is about building another saw-mill. A building has already been erected by Messrs. Smith and Badger for a foundry, but is not yet in operation. The tin, copper and sheet iron establishment of J. S. Thayer & Brother is well known to the community. Recently our friend Beacon has commenced the manufacture of brick, and in a short time will be ready to fill all orders in this respect. We have some eight or ten stores of different kinds, and a full supply of professional gentlemen. We have bakers, butchers, shoemakers, tailors and milliners."

We take from the pamphlet the following statistical facts, showing the prodigious advances of manufacturing towns, which should furnish to the people of the south in particular the most salutary lessons. Let us take the old cities of Charleston and Savannah, and ask why they have so long been as it were stationary, while every thing around is in motion? By the introduction of an extensive system of manufactures, it would be easy to advance the population of these cities two-fold in a single decade. We believe their citizens are now beginning to perceive it.

"The causes of the growth of modern cities are the concentration, or assemblage in certain localities, of the materials, or the most useful materials, which afford labor for the hand of industry, and from the products of which the growing wants of mankind are supplied.

"To sustain this position, we submit the following concise statements, showing the causes of the growth and progress of the several cities and towns respectively mentioned:

"*Birmingham, England.*—This city in 1801 had a population of 73,670, in 1831 of 146,986, in 1839 an estimated population of 190,000, and at the present time of probably not less than 250,000. Its opulence, celebrity and magnitude are ascribable to the *iron, stone and coal* with which the district abounds.

"*Bolton, England.*—The rapid growth and

prosperity of this town dates from 1770–80. Its population in 1778 was 5,604; in 1801, 18,583; in 1811, 25,551; in 1821, 32,973; in 1831, 43,397. It is a seat of cotton manufacture, and the birth-place of Arkwright. Its growth is attributed to its command of *coal*, being situated in a coal district.

"*Bradford, England.*—Township consists of 1,680 acres; population in 1801, 6,398; in 1821, 18,064; in 1831, no less than 23,223, and since that period has increased still more rapidly. Its growth is owing to its manufactures, which are facilitated by its unlimited command of *coal* and its abundance of *iron*.

"*Burnley, England.*—Population in 1801, 3,305; in 1821, 6,378; in 1841, 64,192. A manufacturing town. Cause of growth, abundance and cheapness of *coal* found in the vicinity, with a good supply of freestone, slate, &c. The town is built mostly of freestone.

"*Bury, England.*—A large manufacturing town, consisting of 4,360 acres. Population in 1821, 13,480; in 1841, 77,496. In the parish of the same name, and which includes this town, are *extensive quarries of building stone, and nine wrought coal mines*.

"*Carlisle, England.*—A manufacturing town, supplied with coal from places varying from twelve to twenty miles distant. Population in 1801, 10,221; in 1821, 15,486; in 1841, 36,084.

"*Charleroy.*—An important manufacturing town in Belgium, situated in the centre of the great coal basin of Charleroy. In 1836 it had seventy-two mines in active operation, producing 900,000 tons of coal per annum. Iron abounds, and also quarries of marble and slate. Its furnaces give employment to 3,000 men, and during the winter season 4,000 men are employed in making nails. Its coal, iron and stone have made it what it is.

"*Derby, England.*—A manufacturing town, with both water-power and coal. Population in 1841, 35,015; in 1811 it was only 18,048.

"*Durham, England.*—In 1821 this city had a population of 10,282; in 1831, only 10,520. About this time extensive collieries were opened, and the population immediately increased, so that in 1840 the number of its inhabitants was put down at 40,000. Previous to this it was one of the duller cities in the kingdom. *Stone, lime, coal and iron* abound.

"*Huddersfield, England.*—The township consists of 3,950 acres, and had a population in 1801 of 7,268, in 1831 of 19,035. The population of the parish in 1840 was estimated at 40,000. It is one of the principal seats of the woollen manufacture, and stands in the midst of a rich coal field. There is also an ample supply of water-power.

"*Johnston, Scotland.*—The rise of this town has been more rapid than any other town in Scotland. The ground on which it stands began, for the first time, to be fused, or let, on building leases, in 1781, when it contained

only ten persons. Its population in 1840 is set down at 7,000. Its growth is owing to the introduction of manufactures, it being situated on a fine water-power. It has several foundries and machine-shops, and near the town are four collieries.

"Leeds, England.—A celebrated manufacturing town, and the great centre of the woollen cloth trade. Population of the town in 1831, 71,602. Its eminence is owing partly to its advantageous situation in a fertile country, intersected with rivers, and partly to its possessing inexhaustible beds of coal.

"Leigh, England.—A manufacturing town, with a population in 1841 of 22,229. In 1834, according to Mr. Baines, upwards of 8,000 persons were employed in spinning and weaving cotton and silk, both by hand and power-looms. Its industry and growth is promoted by its abundance of coal and lime.

"Lowell, Massachusetts.—Population in 1820, 200; at the present time, 35,000. Cause of growth, its great water-power.

"Lawrence, Massachusetts.—Present population, 7,500. Four or five years ago it was but a school district. Its water-wheels have graded streets, and lined these with splendid edifices, on alluvial land so poor that it would not average a crop of fifteen bushels of corn to the acre without artificial enrichment.

"Manchester, New-Hampshire, in 1835 was a small hamlet; in 1840 a few mills had increased its population to about 3,000; it is said to contain now about 17,000 souls. Although it is in a hilly and barren country, and receives its materials and sends its products over about sixty miles of railroad, it is still growing with rapidity, because it has the motive-power of the Merrimac.

"Manchester, England.—The great centre of the cotton manufacture in Great Britain, and the principal manufacturing town in the world. Manchester and Salford are separated by the small river Irwell, and form one town, covering 3,000 acres. The population of the town and suburbs, including Salford, in 1801, was 95,818; in 1831, 239,388; and in 1841 was estimated at 360,000. Manufacturing has made Manchester. The steam-engine, with other improved machines for working up cotton, have made its manufactures, and the coal from the inexhaustible coal-field, on the edge of which the city is situated, has fed the engine. Hence the modern growth of Manchester is ascribable to its coal.

"Merthyr-Tydvil, S. Wales.—Population 27,460 in 1831; in 1841, 34,977. It is remarkable for its iron works, and is wholly indebted for its prosperity to its rich mines of coal, iron ore and limestone. Towards the middle of the last century it was an insignificant village, and in 1755 the lands and mines for several miles around the village, the seat of the great works now erected, were let for ninety-nine years for £200 a year.

"Newcastle-upon-Tyne.—Population in 1831, 58,618; in 1841 estimated at 65,000. It owes its importance, if not its existence, to its convenient situation as a place of shipment for the coal wrought in its neighborhood.

"Pittsburg, Pennsylvania.—The population of Pittsburg for each decenary period from 1800 was 1,565, 4,768, 7,248, 12,542, 21,115. With its dependencies it has a present population of about 100,000; and although it has lost the greater part of its transportation and commercial business, it is now growing more rapidly than ever. The copper ore of Lake Superior, the lead of Illinois, the wheat of Michigan, the cotton of Tennessee, and even the iron and sand of Missouri, are transported to and combined by the power that lies in the Pittsburg coal.

"Oldham, England.—A large manufacturing town, chiefly cotton. Population in 1841, 42,594. In 1760 it comprised only about 60 thatched tenements. In 1839 it had two hundred manufactories, set in motion by a steam-power equal to 2,942 horses, and employing 15,391 hands. It has an abundant and immediate supply of excellent coal.

"Rochester, New-York.—Population in 1820, 1,502; in 1830, 9,269; in 1840, 20,191. It owes its great advantages and rapid growth to its vast water-power, created by the falls in the Genesee river.

"Sheffield, England.—Noted for its hardware, cutlery, etc. Population of the parish in 1801, 45,755; in 1831, 91,692; and in 1841, 110,801. Its manufactures are extensive, and known the world over. Coal and iron have made the city.

"Wolverhampton, England.—This town, or rather the district including the town, comprises 16,630 acres. Its population in 1831 was 67,514. In 1841 the population of the town alone was 86,189. Wolverhampton, and the places in its vicinity, owe their rapid rise to the mines of coal and iron-stone.

"Other illustrations, such as Pottsville, Oumberland, Wheeling, Pomeroy, etc., might be adduced, but those already given are believed to be sufficient to indicate the tendency of men at the present time to cluster around and build their homes in such localities as afford them the great staples and materials upon which they may bestow their labor, and for which they may receive the largest rates of compensation."—*Cannellton Economist*.

MANUFACTURES.—PROGRESS OF THE COTTON MANUFACTURE IN THE UNITED STATES—We copy from the last number of the "*Dry Goods Reporter*," the organ of the manufacturing interest, published in New-York, the following condensed and interesting account of the progress of the cotton manufacture in the United States during the last twenty-three years. The reader will perceive that the greatest amount of increase has actually

occurred during the existence of the present tariff, thus refuting all the pretences that the cotton manufacturing interest is suffering for want of adequate protection in the shape of a prohibitory tariff, giving it the monopoly of the American market:

Sir:—I have thought it might be interesting and important, both to your subscribers and the public generally, to bring before them at the present time the following statistical information, comprising the annual consumption of cotton in the United States for the past twenty-three years, and the exports of the domestic manufactured cottons for nearly the same period, which, at one view, shows the progressive increase of these exports, and the far more remarkable increase of the annual consumption of the cotton manufactured goods in the United States. And I propose to add such commentary as the examination of these statistics has brought to my mind.

I begin with the apparent annual consumption of cotton in bales for the years respectively named:

Bales.	Bales.
In 1826-27..149,516	In 1838-39..276,018
1827-28..120,593	1839-40..295,193
1828-29..118,853	1840-41..297,288
1829-30..126,512	1841-42..267,850
1830-31..182,142	1842-43..325,129
1831-32..173,800	1843-44..346,744
1832-33..194,412	1844-45..388,006
1833-34..196,413	1845-46..422,397
1834-35..216,888	1846-47..427,967
1835-36..236,733	1847-48..531,772
1836-37..222,540	1848-49..518,039
1837-38..246,063	

Total of 23 years being....6,281,868

These quantities do not include the cotton consumed in the cotton-growing states themselves, which, for the year ending 1st September, 1848, was estimated at 75,000 bales, and 1st September, 1849, 110,000, thus making the real consumption of raw cotton in the United States for the years ending 1st September, 1848, 606,772 bales; 1st September, 1849, 628,039.

Before proceeding to the statistics of exports, let us look at some of the prominent facts exhibited by the foregoing table of annual consumption.

	Bales.
In 1826-27 the consumption stated is	149,516
1827-28	120,593
1828-29	118,853

Making.....388,962
Averaging per annum....129,654

In 1846-47 the consumption stated is	427,967
1847-48	531,772
1848-49	418,039

Making.....1,447,778
Averaging per annum....492,593

Being an increase of consumption, from the three years first named to the last named, of 280 per cent. in twenty-three years; or say the average of 12 per cent. per annum. This, it will be understood, is exclusive of the annual consumption in the cotton-growing states, where the increase may have been even larger. (See Cotton.)

MANUFACTURES.—EXTENSION OF COTTON AND WOOL FACTORIES AT THE SOUTH.—We have been favored by the author (E. Steadman, of Tennessee) with a very able and instructive paper upon this subject, which we regret our inability to publish entire, but from which we shall freely extract. Mr. Steadman recommends the application of slave labor throughout our limits to these purposes. In this we heartily agree, such labor having been found most advantageous wherever adopted.

STATISTICS OF A COTTON AND WOOLLEN MILL OF 5,000 SPINDLES; \$100,000 CAPITAL.

In order that the reader may fully understand us as we go along, we will here lay before him an estimate of one year's operation of the proposed cotton and woollen mill of five thousand spindles, with eighty-eight cotton and twenty-four woollen looms for manufacturing osanburgs, sheetings, yarns, jeans, and linsey, the estimated cost of which, including lot, buildings and machinery, ready for operation, is \$100,000.

The contemplated mill will annually make the following amount of goods:—1,710 dozen of assorted yarns per day, which in three hundred days will amount to 513,000 dozen, weighing $7\frac{1}{2}$ oz. each, which are now worth by wholesale 9 cents per dozen; making in the whole..... \$46,170 00

Twenty-four osanburg looms will make $87\frac{1}{2}$ yards each per day, which in three hundred days will make 270,000 yards, weighing $\frac{1}{2}$ lb. per yard, worth $11\frac{1}{4}$ cents, amounting to..... 31,050 00

Sixty-four looms for weaving sheetings, will each make $38\frac{1}{2}$ yards per day, weighing $2\frac{1}{2}$ yards to the lb, which in three hundred days amounts to 640,000 yards, at $8\frac{1}{2}$ cents per yard..... 52,800 00

Twelve linsey looms will make $87\frac{1}{2}$ yards each per day, making in three hundred days 135,000 yards, weighing $\frac{1}{2}$ lb. to the yard, which is worth, plain and colored, on an aver-

age, 80 cts per yard, amounting to.....	40,500 00
Twelve jean looms will make 28 yards per day, and in three hundred days, 100,800 yards, weighing 1 lb. to the yard, worth, plain and colored, 40 cents per yard, amounting in three hundred days to.....	40,320 00

Total products per annum, \$210,840 00

The above result will cost for cotton, wool, labor, and incidental charges in manufacturing, as follows:

Cotton required, 766,200 pounds, delivered at the mill, including all charges, at 10 cents per pound, amounts in the whole to.....	\$76,620 00
Wool required, 157,837½ lbs. delivered at the mill, including all charges, at 31½ cents per lb., amounts in the whole to.....	49,324 00
Wood required, 2,000 cords delivered at the mill, including all charges, at \$1.75 per cord, amounts to.....	3,500 00
Labor to manufacture the above goods, amounts to.....	25,725 00
Commissions, freights and charges, to include all costs of sale at 10 per cent, amounting to..	21,064 00
Interest on \$80,000 capital necessary to be invested in stock, on an average one year with another, at 7 per cent. per annum, amounts to.....	2,100 00
Insurance on buildings, machinery, and stock, \$100,000, at 2½ per cent.....	2,500 00
Depreciation on the value of machinery, worth \$75,000, 5 per cent.....	3,750 00
Incidental expenses, which is the cost of oil, leather, starch, dye-stuffs, &c.....	6,000 00
Total expenses.....	\$190,603 00
Total profits.....	\$20,237 00

In addition to the styles of goods mentioned in the above estimates, a portion of the machinery and labor can be profitably employed, and no doubt will be, in the manufacture of cottonades, bed-tickings, stripes, checks, and plaids.

In the table of expenses will be found an item of \$25,725 for labor. This item embraces all the labor necessary to carry on the mill, or that is in any way connected with it. For the satisfaction of those who are not familiar with the subject, we have made the following analysis of that item, in order that

every man may calculate for himself the amount paid to each description of operatives, and form his own conclusions as to its sufficiency.

TABLE OF LABOR.

8 Boys, per annum,	\$50 00 each,	\$400
106 Women "	112 50 "	11,925
23 Men "	250 00 "	5,750
1 Engineer "	600 00 "	600
1 Carpenter "	450 00 "	450
1 Machinist "	600 00 "	600
4 Overseers "	600 00 "	2,400
1 Clerk "	600 00 "	600
1 Superintendent,	1,500 00 "	1,500
1 Agent,	1,500 00 "	1,500

147 \$25,725

These are the amounts proposed to be paid, and they contemplate that each person boards himself or herself, as the case may be.

No question, we presume, will be raised in regard to the liberality of any of the above items, except for the labor of the 106 women and the 23 men. The wages allowed the women, it will be seen, is \$112.50 per annum, which, for fifty weeks, deducting two weeks for holidays and lost time, amounts to two dollars and twenty-five cents per week. The wages allowed the 23 men, who are mostly common hands, is \$250, which, for fifty weeks, amounts to five dollars per week.

"In Lowell, labor is paid the fair compensation of 80 cents a day for men, and \$2 a week for women, while in Tennessee the average compensation for labor does not exceed 50 cents per day for men, and \$1.25 per week for women. Such is the wisdom of a wise division of labor."

We will now briefly recapitulate the advantages we have enumerated in favor of manufacturing here:

766,200 pounds of cotton costs us one cent per pound less than the northern manufacturers..	\$7,662 00
157,837½ pounds of wool costs one and a half cents per pound less than the northern manufacturers.....	2,367 50
Five per cent on the value of the goods, worth \$210,840...	10,670 00

Sum total of advantage..... \$20,699 50

It will be seen that we have here represented an advantage in favor of southern manufactures of over 20 per cent, and from the facts in our possession, we cannot believe the estimate extravagant. We have now before us a very able work written by Hamilton Smith, Esq., of Louisville, Ky., on this subject, in which he demonstrates that locations on the Ohio river have an advantage over the northern establishments of 21½ per cent; and as a matter of course, an establish-

ment here in the immediate neighborhood of the cotton fields would have a still greater advantage. Mr. James Montgomery—the author of several standard works on the manufacture of cotton in Europe and America, and very high authority on all subjects connected with manufacturing—recently made the following statements of the advantages of the south and west for manufacturing, after having made a personal examination of their facilities. He says:

"I have read Gen. James' pamphlet, and the pamphlets written by Mr. Gregg, on the comparative advantages of the south for manufacturing; and yet, after all I have read on the subject, I may say with the Queen of Sheba, half the truth has not yet been told. Cheap living, and, of course, low wages—cheap cotton, coal and iron, constitute the great elements of success in the introduction and prosecution of the cotton manufacture. No country in the world possesses these elements in a degree equal to the southern and southwestern sections of the United States. Great Britain, with her cheap coals and iron, stands at the head of all nations in point of wealth and commerce. She is now making a desperate effort to introduce cheap living, but she can never introduce cheap cotton. The northern states can never equal the south in either of the above-named elements."

The cotton crop of Tennessee amounts to 200,000 bales, averaging 450 pounds. This will give us 90,000,000 pounds per annum, the average price of which is supposed to be about 6½ cents. The value of the crop, then, is \$5,850,000. To produce this amount of cotton would require 1,440,000 acres of land, averaging 250 pounds to the acre in cotton. The average value of these lands cannot be less than \$15 per acre, which gives us a capital of \$21,000,000 invested in land alone.

To cultivate this amount of land will require 51,430 able-bodied hands, each tending seven acres of cotton, producing 250 pounds to the acre. If we value them at \$500 each, which would be a low estimate, we find a capital invested in slaves to produce this cotton of \$25,715,000.

To these items we must add the amount of capital invested in mules, horses, ploughs, and all other farming implements, estimated at about \$2,695,000, making the total amount of capital employed to produce the 90,000,000 pounds of cotton, \$50,000,000.

To manufacture the 90,000,000 pounds of cotton into cloth would require 500,000 spindles, with all the preparations for weaving, the cost of which, including the powers, (water or steam,) sites and buildings, would be \$10,000,000.

In addition to this \$10,000,000, which would all be consumed in the erection of buildings, purchase of sites and machinery, there would be required the sum of \$2,500,000,

upon which to operate in the purchase of material, payment of operators, &c., which would run up the amount of capital necessary to \$12,500,000.

The 90,000,000 pounds of cotton will make 225,000,000 yards of domestics, the cotton yielding two and one half yards to the pound. The average price of these domestics is not less than 7½ cents per yard, which would make the aggregate value of the goods manufactured from the cotton crop of Tennessee, \$16,875,000.

To operate the above amount of machinery, 25,000 common hands, embracing men, women and children, would be required, at an annual expense of \$3,125,000. Also, 1,000 men, machinists, overseers and superintendents, at an annual expense of \$750,000, making the cost of the labor.....	\$3,875,000
The incidental expenses, embracing repairs, oil, leather, starch, &c., would amount to.....	1,500,000
Five per cent. to be set apart as a sinking fund, to cover the wear and tear of machinery, buildings, &c.	500,000
Insurance, 2½ per cent., on \$10,000,000.....	250,000
Ten per cent. upon the value of the goods, to cover commissions, freights and losses,....	1,685,500
Cost of 90,000,000 pounds of cotton delivered at the mill, say 6½ cents per pound.....	6,075,000

Making the annual expenses, \$13,885,500

If we deduct this bill of expenses from the value of the goods produced as above, (\$16,875,000,) we have an annual profit of \$2,989,500, or *twenty-four per cent.* upon the capital of \$12,500,000.

Thus it will be seen, that while the agriculturists who produce this cotton make but 11½ per cent. upon their capital, the manufacturers who convert it into fabric clear 24 per cent., or a fraction over double the amount upon their capital. Are there any so blind as not to see the advantages of the system?

SLAVERY AND MANUFACTURING.—We now approach a subject fraught with the most important consequences to the people of the slaveholding states, and which should command their serious consideration.

The events of the last three years must have satisfied every intelligent man that the institution of slavery in the United States has already reached the limits of expansion—that its further extension is a physical impossibility. We have heretofore been excluded from the territory north of the line of the Missouri compromise, and the admission of California

Under these circumstances, the true policy of the south is distinct and clearly marked. She must resort to the same means by which power has been accumulated at the north, to secure it for herself. She must embark in that system of manufacturing which has been so successfully employed at the north. We hold the raw material, and if we will but go into its manufacture, we can control the world. All civilized nations are now dependent upon our staple to give employment to their machinery and their labor, and they cannot do without it. If, then, we manufacture a large portion of it ourselves, we reduce the quantity for export, and the competition for that remainder will add greatly to our wealth, while it will place us in a condition to dictate our own terms. The manufactures will increase our population; increased population and wealth will enable us to chain the southern states proudly and indissolubly together by railroads and other internal im-

We have seen that this manufacturing system will induce emigration to us; that it will add both to our commercial and political power, and above all, it will enable us to defend successfully those rights guaranteed to us by the constitution; and if the evil day should ever come when the south shall be satisfied that she cannot remain in the Union upon equal terms, or with safety to her institutions, it will place her in a condition to maintain her separate nationality.*

Difference, \$41 00
Or over thirty per cent. saved in the cost of labor alone."

MANUFACTURES.—RELATIVE COST OF STEAM AND WATER POWER.—In a pamphlet recently issued at Louisville on "The Relative Cost of Steam and Water Power; the Illinois Coal Fields, and the Advantages offered by the West, particularly on the Lower Ohio, for Manufacturing," there is much information grouped, establishing the superiority of steam over water power, for machinery on a large scale. We extract so much as will give the argument, supported by figures.

We deem the present a suitable time to introduce the subject to our readers, in view of the establishments now in progress in the south and west for manufacturing. Among the cotton mills lately put in operation, under favorable auspices, is one at Tuscaloosa, Alabama, owned by the "Warrior Manufacturing Company." When the building is filled, as it will soon be, it will contain at least 6,000 spindles and 150 looms. The working has begun with a less quantity, but orders are in process of execution at the north for the entire amount. Steam is used, from coal taken from the inexhaustible bed in the vicinity. White labor is alone employed in the establishment.

The satisfaction given by the starting of this mill has encouraged other investments of the same kind; and we learn that a wealthy citizen of Tuscaloosa county has closed a contract for machinery to be delivered next fall on estimates of \$50,000, himself the sole owner. Companies have been formed, and others will follow, under the general charter law of the state for such objects. Individuals have only to specify in writing the name, capital, and purposes of their company, to secure the privileges of incorporation—the instrument to be recorded in the office of the clerk of the county court.

But, we did not intend to dwell on the prospects of any one place in the manufacturing enterprise. Our object mainly was to show that steam was preferable to water as a motive power for cotton mills. To this end, we quote from the pamphlet alluded to, which is based on calculations for the country on the Ohio, but not less applicable to other sections where coal may be obtained cheaply, as in Alabama.

Here are the promised extracts:

A cotton mill of ten thousand spindles will turn out two tons of goods a day—say six hundred tons per annum; 100 pounds of cotton will average 89 pounds of cloth; 666 tons of cotton are therefore required by the mill; 1,266 tons cost, aside from drayage, (a considerable item,) \$2,532 in transportation between the mills and where the goods are sold. Aside from the extra cost of water power, this mill would require a capital of not over \$250,000—perhaps \$200,000 would be sufficient. This item then is 1 or 1½ per cent. on the capital invested. Mr. Montgomery, in his work (published in 1840) on the compar-

ative cost of manufacturing in England and America, says:

"The attention of manufacturers in New-England has been for some time directed to the advantages of steam as a means of propelling machinery, the advantages of a good location being considered equal to the extra expense of steam power."

Another important item of expense avoided by a steam factory, is that of heating the mill. Mr. Montgomery gives the average cost of this at \$467.80 per annum for a mill of say 4,000 spindles. Six hundred dollars per annum may then be put down as cost of heating a mill of 10,000 spindles. And it is not only necessary that the atmosphere in the mill should be at the proper degree of temperature but of the proper dampness, so that the threads shall run smoothly. Both purposes require a large part of the fuel and machinery used in a steam mill.

The foregoing are not all, but are the most important difficulties attending the use of water power for cotton and woollen factories. Most of the difficulties are found wherever this power is applied; and, as a general rule among engineers, at any position where coal can be had at ten cents a bushel, steam is as cheap as water power at its minimum cost. Such is the theory. The facts seem to be beyond this; for in New-England, where water power is so abundant, the largest cotton factories now being erected are to have steam as a motive power; of this character are the Naumkeag mill at Salem, and that at Portsmouth; the first of 40,000, and the last of 50,000 spindles, and these are the largest in the world. At Fall River, Bristol, and Newport, steam factories are in successful operation. The fine goods of the Bartlett steam mills at Newburyport have a wide reputation. The recent erection of the James Mill at the same place, shows the success of the former; and within the last year the escape steam of a new mill at Lowell is drowning the noise of the falls of the Merrimac. Let it be remembered that coal in New-England costs, on an average, twenty-three cents per bushel.

As before stated, the water power at Lowell now costs \$5 a spindle; \$50,000 of capital is to be invested in power to run a mill of 10,000 spindles.

The interest on this per annum is. . . . \$3,000
Now add the cost of heating the mill. . . 600
And the cost of transportation. 2,532

And you have one side of the equation
as against steam. \$6,132

I cannot fix with precise accuracy the steam power and fuel required for a mill of 10,000 spindles. The only authority before me gives this estimate for one of 8,700 spindles, with the necessary machinery for preparing the

cotton and manufacturing the cloth. A high-pressure engine of 40 horse power—length of stroke 4 feet, diameter of cylinder 1 foot—makes 40 single or twenty double strokes per minute; three or four round boilers, 15 feet long by 2½ feet in diameter, requiring 200 gallons of water, and consuming 1½ chaldrons (45 bushels) of bituminous coal per day—pressure of steam sixty-eight pounds to the square inch. To do double the work does not, as I am told, require double the power, and nothing like double the fuel. This estimate was made eight or nine years since; within that time very important improvements have been made in the application of steam power and the use of fuel; and probably I may safely say that an engine of 90 horse power, requiring 80 bushels of coal a day, is sufficient for the mill of 10,000 spindles.

Then 80 bushels coal for 300 days, at 23 cents per bushel.....	\$5,520 00
Add salary of engineer.....	500 00
	<hr/>
	\$6,020 00

Showing an advantage in favor of steam, from coal at *twenty-three cents a bushel*, of \$112 per annum. The cost of an engine of 90 horse power, boilers, belting, pipes, &c., not required for the purposes specified in the other, would be probably not over \$9,000, while the cost of communicating the water power to the machinery would be at least \$17,000. Montgomery, in the work already quoted from, states the cost of two water wheels, equal to eighty horse power, including gearing, gates, shafting, belting, &c., at \$17,000. The Tremont and Suffolk mills at Lowell contain 12,000 spindles, make coarse goods, and have six water wheels, the cost of each wheel between \$3,000 and \$3,500, entirely exclusive of the cost of excavating and walling up the branch canals to and from the mills.

It is a mooted question which will last the longer, the wheels or the engine; but give \$3,000 to equal the difference, and there is the interest of \$5,000 to add to the advantage before stated.

After referring to the cost of working cotton mills in Great Britain and the New-England states, and pointing out the reduced scale of expenses in the coal region, the author of the pamphlet presents the following

SUMMARY

Of the advantages of manufacturing cotton where the seams of the Illinois coal field are cut by the lower Ohio.

We have the following data as elements of the calculation:

A mill of 100,000 spindles will consume 666 tons of cotton, make 600 tons of cloth, and use 24,000 bushels of coal, 2,530 gallons of

oil, and 46,000 lbs. starch per annum; it will require of operatives 25 men and boys and 200 females, whose wages will average the Lowell prices—say males 80 cents per diem, and females \$2 dollars per week, besides board, or males \$6,000, females \$20,800 per annum. The average prices of board at Lowell are per week for males \$1 75, and for females \$1 25—or total per annum \$17,375.

It is safe to assume that the prices of board on the lower Ohio would be one third less than at Lowell, where a sirloin of beef costs from 15 to 16 cents the pound, potatoes from 60 cents to one dollar per bushel, and most of the other articles of food in the same proportion. It will be remembered that the rents of the boarding houses at Lowell are regulated by a "sliding scale," and are dependent on the general prices of food; sometimes these have, as is said, been entirely abated, and the boarding-house keepers have received gratuities from the corporation, so as to make a living without changing the prices of board; and it is fair, therefore, to include the cost of board as a part of the wages paid by the corporations.

We have before, on page 22, average saving in cost of transportation and interest on difference of capital.....	\$44,182 80
Add difference of one third in cost of board on \$17,375.....	5,791 06
Add difference of 19 cents per bushel on 24,000 bushels coal..	4,560 00
	<hr/>
Total saving per annum.....	54,533 86

Deduct \$1 50 per ton, supposing the goods are to be sold at Louisville, St. Louis or Memphis.....	900 00
	<hr/>
	\$53,633 86

If, to save all cavil, we deduct 8 per cent. to cover interest, insurance and commission on sales at these cities on 4,000,000 yards at 8 cents—or \$320,000,	9,000 00
	<hr/>
	\$44,633 86

If lard oil is used, we have the advantage of 15 cents per gall.; but if the use of sperm oil is continued, we pay an advanced price of 15 cents per gall., or \$379 50. We should, however, save about 1 cent per lb. in price of starch, or \$460; and in flour, wood, gas (or lard oil for lamps) probably \$600 per annum.

We have a clear saving of over 22 per cent. on \$200,000, which is an ample capital.

I am informed by those who have the means of knowing the fact, that the average dividends declared on cotton mills controlled in Boston have been fourteen per cent. for the last five years; but I am not advised of the amount of

earnings in these mills that has been added to surplus funds, or invested in new machinery, improvements, property, or new stocks.

As the new city of Lawrence is growing with magical rapidity, and new cotton mills are in progress of erection all over the New England seaboard, notwithstanding the changes in the tariff and the desperate struggles of the English manufacturer to drive us out of foreign markets, (so desperate that brown cottons have been sold cheaper at Calcutta than their cost in Manchester;) and as we know that the bank and railroad dividends in New-England will average 8 per cent, it will not be considered an over-estimate to put this average on our capital to the savings above; or \$18,000 plus \$44,633 86—\$60,633 86, or over 30 per cent. dividends, to be reasonably expected from our mills.

If the *maximum* of advantages is taken and added to 20 per cent. average of earnings of eastern mills, (and it is believed that this calculation would be nearer the truth,) the estimated profits here would be so enormous that western men could scarcely be brought to believe the accuracy of the calculations without the severest tests of experience.

Several months since, and before these articles were written, I sent the results to a friend and practical manufacturer of cotton on the Ohio. His answer was this: "An Irish laborer once wrote home to his friends that he got meat for his meals three times a week. 'Why, you lying dog,' said his employer, 'do you not get meat three times a day, and every day?' 'Yes,' said the laborer, 'but I want my friends to come and join me; meat three times a week will bring them here, but if I promise it three times a day they won't believe a word of it.'"

Another practical manufacturer in the west writes to me that the calculations are substantially correct, and the results within the truth, but that a model mill, on the Lowell system, is required to convince the western capitalists of these truths.

MANUFACTURE OF SHOES AT THE SOUTH.—AMOUNTS WHICH MIGHT BE GAINED TO US BY ABANDONING THE IMPORTS OF SHOES, &c.—There are now many shoe factories in operation or going up at the south. The Richmond Dispatch thus speculates upon the subject:

"It has been estimated that ready-made shoes, to the value of not less than five millions of dollars, are annually imported into the several southern states from the north. We are not aware of the quantity taken in Virginia, but we have no doubt it is very large, since one house in this city (so we learn) imports annually to the amount of \$100,000. We regard it as highly probable that the state of Virginia imports from the north, annually, shoes to the value of \$2,000,000. Much the

larger portion of these shoes, it is believed, is made in Boston; that very city which sets the laws of the United States at defiance, in order to prevent southern gentlemen from recapturing their slaves.

"Now what is to prevent us in this city from manufacturing all the shoes which may be wanted to supply our own state? We have the same facilities that they have in Boston for carrying on the business by wholesale, and there can be no doubt that, provided the merchants, who now import so largely, could obtain their supplies at home, they would greatly prefer it. Many of them, it is believed, own property in the city, and are otherwise interested in its prosperity. They know that by offering additional means of employment, they add to the population of the city, and that every addition of an inhabitant increases the value of their property. We will not take into the account, at present, those merchants from the country who pass by Richmond without stopping, and go to the north for their supplies. We will only suppose that the ready-made shoes imported into this city from the north, and sold here, were manufactured in Richmond—what a great addition would it be to the means of employment! How many boys and females would find means of earning their bread, who are now suffering for a regular supply of the necessities of life!

"We have no means of ascertaining how much of the two millions, which we have supposed to be sent from Virginia to the northern cities, and invested in ready-made shoes for the Virginia market, actually goes from Richmond. We will confine our remarks, therefore, to the \$150,000 sent by the single house, already alluded to. Let us see how many persons these would give employment to, if made in Richmond.

"We see it stated that a case of shoes averages in the northern shoe markets \$40.00; so that this house imports, annually, 3,750 cases of shoes. As each case contains sixty pair of shoes, the whole number of cases contain 225,000 pair, or 450,000 shoes. We are not aware how many shoes a good workman can average a day, but we will suppose three shoes. Allowing three hundred working days to the year, a good workman could make at this rate nine hundred in that space of time. To make the whole number, then, it would require five hundred good workmen, and all these workmen would be fed and clothed here at home. We say nothing of the females employed in stitching and binding, but their number would be considerable, and they too would be fed and clothed in the city.

"By the exercise of a proper economy, this \$150,000 would be kept at home, for the employment of our own people. Let us see how much of our own merchandise and produce these five hundred workmen would take.

"We will allow to each workman twelve dollars a year for clothing. This is a very moderate allowance; far within the mark, we are convinced. Yet it will answer our purpose for the present. Now here would be \$6,000 to be distributed among our merchants for dry goods, and among our tailors and sempstresses for work. How many of these latter would it feed! Again, the food consumed by each of these workmen would amount to at least \$100, giving \$50,000 more to be distributed among our bakers, grocers, millers, &c. This of itself would form no inconsiderable item; but when we take into consideration the number of idle hands it would set in motion, its importance grows upon us. We say nothing of the lodging of these persons, nor of the sheets, blankets, counterpanes, bedsteads, &c., affording employment and profit to merchants, needlewomen, cabinet-makers, upholsterers, &c., nor of the crockery and hardware, and other necessities which they would be compelled to use. Upon a fair average, we think that if these shoes were manufactured here in Richmond, it would cause an additional expenditure here of at least \$250,000, besides giving employment to seven or eight hundred persons. But this one house, it must be recollected, does but a small portion of the shoe importing business, comparatively. We have no doubt that the annual sums expended in this manner, reach, if they do not exceed, \$500,000, and that the employment of it in the way indicated would add to the expenditure in the city 8 or 900,000 dollars, giving employment to more than 3,000 persons.

"That the whole wants of the city of Richmond and its customers might very well be supplied at home, we have not the slightest doubt. That it is time for Virginia to think of doing some such thing, the high-handed measures lately adopted in Boston sufficiently prove. As long as we are dependent upon these people, they will insult us at pleasure. Let us cut loose from them, thus far at least."

MANUFACTURES, GREAT BRITAIN.—**MANUFACTURING PROGRESS OF GREAT BRITAIN IN COTTON, WOOL, FLAX AND LINEN, SILK, ETC., WITH PRODUCTIONS AND PERSONS EMPLOYED.**—Returns have just been published, in compliance with an order of the House of Commons of the 15th August, 1850, on the motion of Mr. Pilkington, the member for Blackburn, which possess very great interest as an authentic record of several of the most important branches of our national industry. We published in our last the summaries of the returns under each branch of manufacture for the United Kingdom, together with a summary of the whole; and this week we publish the details of the same for the counties of England and Wales, by which the localities of the various manufactures in that part of the kingdom may be

better understood. These are the most complete series of returns ever issued, of the number and power of the factories in the textile manufactures, with the number, age, and sex of the persons employed in them. They are not in exactly the same form as the returns made in 1834, which are to be found in the volume of "Tables of Revenue, Population, and Commerce" for that year. We cannot, therefore, compare the two series at all points. But in the most important particulars they correspond, and thus we are able to institute a comparison, and to show the remarkable progress that has been made, in the space of sixteen years, in these great departments of industry. To a very considerable proportion of our readers it will be interesting to trace the advances made in the branches with which they themselves may be directly or indirectly connected, and to compare the several branches among each other. Of course, these returns apply only to the operations carried on in factories, and under the inspection of the factory inspectors, and they do not, therefore, include the auxiliary branches of the manufactures, such as hand-loom weavers, dyers, manufacturers of lace, hosiery, &c.

COTTON FACTORIES, UNITED KINGDOM.—In 1834 the number of cotton factories was 1,804; in 1850 it was 1,932; increase, 628 factories, or 48 per cent.

In the hands employed there was a somewhat greater increase: namely, from 220,134 in 1834, to 330,924 in 1850; increase, 110,790, or 50 per cent.

The increase in the steam and water-power employed in the cotton mills is much greater. These particulars are not given in the returns published by the Board of Trade for 1834, but they were furnished by the factory inspectors to Mr. Edward Baines, for his "History of the Cotton Manufacture," published at the beginning of 1835, and we extract them from that work, (p. 394.) In 1834, the horse-power was 80,858 of steam, and 10,203 of water—total, 41,056 horse-power. In 1850, the horse-power was 71,005 of steam, and 11,550 of water—total, 82,555; being an increase of 100 per cent.

The number of spindles used in the cotton manufactures was not given in any returns of the factory inspectors in 1834; but it was estimated by Mr. E. Baines, on a comparison of the authorities of Burn, Kennedy, &c., at 9,333,000, (p. 383.) In 1850, the number was 20,977,017; being an increase of 102 per cent.

The number of power-looms was estimated by Mr. Baines, in 1834, at 100,000; it is given in 1850 as 249,627; increase, 149,627, or 150 per cent. In 1834 there were believed to be 250,000 hand-loom weavers; we have no means of stating the number in 1850.

The import of cotton wool increased from

302,656,837 lbs. in 1833, to 755,469,008 lbs. in 1849; being an increase of 451,812,168 lbs., or 148 per cent.*

Thus, as might have been expected from the improvements in machinery, and the speeding of the machines since 1834, the increase in the hands employed is less than the increase in the steam and water power, or in the spindles, and this again is less than the increase in the cotton wool consumed. The increase of hands has been 50 per cent., of steam and water-power 100 per cent., of spindles 102 per cent., of power-loom 150 per cent., and of cotton wool consumed 148 per cent. Thus the extent of the manufacture has immensely increased; but, owing to the mechanical improvements, the productiveness of each workman, and of the machinery, has increased far more; of course, the consumer gains greatly by the reduction that necessarily takes place in the price of the manufactured article; the consumption increases, and this reacts upon and increases the manufacture.

We give the particulars in a tabular form:

	In 1834.	In 1850.	Increase per cent.
Mills.....	1,304	1,322	48
Persons employed.....	220,134	330,924	50
Steam-power, (horses).....	30,833	71,045	100
Water-power, (do.).....	10,203	11,550	102
Spindles.....	9,833,000	30,977,017	150
Power-loom.....	100,000	249,637	150
Cotton wool imported, lbs.....	302,656,837	755,469,008	148

The principal seats of the cotton manufacture are shown by the numbers of factory operatives in different countries. Out of the whole number of 330,924, there are found 215,983 in Lancashire, 85,772 in Cheshire, 18,691 in Yorkshire, 22,769 in Lancashire, and 7,884 in Renfrewshire; the rest are scattered over other parts of the kingdom.

WOOLLEN AND WORSTED FACTORIES.—In 1834, these two branches of manufacture,

which are kindred, yet distinct, were put together under the general head of "wool." They are now given separately. In 1834, there were 1,822 mills; in 1850, there were 1,497 woollen mills, and 501 worsted mills—total, 1,998; increase, 676 mills, or 51 per cent.

The hands employed were, in 1834, 71,274; in 1850, there were 74,443 employed in the woollen mills, and 79,737 in the worsted mills—total, 154,180; increase, 82,906 hands, or 116 per cent.

There is no document of authority, so far as we know, giving the steam or water-power of the mills, or the number of spindles employed in either branch of this manufacture, in 1834. The quantity of foreign and colonial sheep's wool retained for home consumption in 1833, was 39,065,620 lbs.; in 1849, the quantity imported was 75,100,833 lbs. of sheep's wool, and 1,655,800 lbs. alpaca wool—total, 76,756,133 lbs., of which 12,324,415 lbs. sheep's wool, and 126,082 lbs. alpaca wool, was re-exported; leaving for home consumption, 64,805,836 lbs. of both kinds. Increase since 1833, 25,239,016 lbs., or 64 per cent. There are no materials for stating the quantity of British wool consumed at the two periods. Mr. McCulloch estimates the quantity of British wool used annually (eight or ten years since) at 110,000,000 lbs.; but we cannot offer any opinion on the comparative quantities in 1833 and 1849; though it may be said that the increase cannot be any thing approaching to the increase in foreign and colonial wool.

It appears, then, that the increase in the number of mills in the woollen and worsted manufactures since 1834, is 51 per cent.; the increase in the hands employed 116 per cent.; and the increase in the consumption of foreign and colonial sheep's wool, which forms less than one half the wool consumed, is 64 per cent.

We give the facts in tabular form, thus:

	In 1834	In 1850.			Increase per cent.
		Woollen.	Worsted.	Total	
Mills.....	1,322	1,497	501	1,998	51
Persons employed.....	71,274	74,443	79,737	154,180	116
Steam-power, (horses).....	—	13,455	9,890	23,345	—
Water-power, (do.).....	—	8,609	1,025	10,300	—
Spindles.....	—	1,565,278	875,830	2,441,108	—
Power-loom.....	—	9,439	32,617	42,056	—
Foreign and colonial wool consumed, lbs.....	39,065,620	64,305,636	—	—	64

The woollen mills are scattered over a greater number of counties in England, Scotland, and Ireland, than any other description of mills; but, of 74,443 hands employed, there are found 40,611 in Yorkshire, 8,816

in Lancashire, 6,043 in Gloucestershire, 2,867 in Wiltshire, and 2,175 in Somersetshire.

Of the worsted mills, by very far the largest number are in Yorkshire. Out of 79,737 hands employed, 70,905 are in this county, chiefly in the parishes of Bradford, Halifax, Keighley, and Bingley.

The increase that has taken place in the worsted manufacture since 1834, has been much greater than in the woollen manufacture.

* In this and all the subsequent comparisons of imports, &c., we take the years 1833 and 1849, in order to have an interval of sixteen years, which is the interval between the factory returns; the trade accounts for the year 1850 are not yet made up.

FLAX AND LINEN FACTORIES.—In 1834, there were 347 flax mills; in 1850, there were 393; increase, 46, or 12 per cent.

But the hands employed were 33,283 in 1834, and 68,434 in 1850; increase, 35,151, or 105 per cent.

The raw material imported, flax and tow, or codilla of flax and hemp, was, in 1833, 1,159,633 cwts.; and in 1850, it was 1,806,786 cwts.; increase, 677,153 cwts., or 60 per cent.

	In 1834.	In 1850.	Inc per ct.
Mills	347	393	12
Persons employed	33,283	68,434	105
Steam-power, (horses).....	—	10,905	—
Water-power, (horses)....	—	3,387	—
Spindles	—	965,031	—
Power-looms	—	1,141	—
Flax, &c. imported (cwts.).	1,129,633	1,806,786	60

In this manufacture both Scotland and Ireland have the advantage over England; whereas, in 1834, England had nearly as many hands employed in the trade as both Scotland and Ireland. In England, out of 19,001 hands employed, 11,516 are in Yorkshire, and 2,724 in Lancashire. In Scotland, out of 28,312 hands employed, 16,264 are in Forfarshire, 4,300 in Fifeshire, and 2,899 in Aberdeen. In Ireland, out of 21,121 hands employed, 11,857 are in Antrim, (Belfast,) and 4,336 in Down. The soil of Ireland appears to be peculiarly favorable to the linen manufacture, which has existed in Ulster for centuries. Until lately, however, the spinning by machinery was chiefly carried on in England and Scotland; but an amazing start has been made in Ireland in this respect; in 1834 only 3,681 hands were employed in flax mills in Ireland, and in 1850 the number was 21,121; being an increase of 17,440 hands, or 474 per cent. in sixteen years.

SILK FACTORIES.—In 1834, the number of silk mills was 263; in 1850, it is 277; increase, 14 mills, or 5 per cent.

The number of hands employed was 30,682 in 1834, and 42,544 in 1850; increase, 11,862 hands, or 39 per cent.

The quantity of waste silk retained for home consumption in 1833, was 4,417,627 lbs., and in 1850 it was 4,518,132 lbs.; increase, 100,504 lbs., or 2 per cent. The import of thrown silk was 229,119 lbs. in 1833, and 614,689 lbs. in 1849; increase, 168 per cent.

	In 1834.	In 1850.	Inc per ct.
Mills	263	277	5
Persons employed	30,682	42,544	39
Steam-power (horses)	—	2,358	—
Water power "	—	853	—
Spindles	—	1,225,560	—
Power-looms	—	6,092	—
Silk (raw) imported, lbs. ...	4,417,627	4,518,132	2
Do. (thrown) do	229,119	614,689	168

The chief seats of the silk factories are in Cheshire, Lancashire, Derbyshire, Warwickshire, and Yorkshire.

GENERAL SUMMARY.—The view given of our manufacturing industry, in the several departments of our textile manufactures, by comparing the returns of 1850 with those of 1834, is extremely satisfactory. The number of mills has increased within the last sixteen years from 3,236 to 4,330, or 34 per cent.; and the number of persons employed in them from 355,373 to 596,082; being an addition of 240,709 operatives, or 68 per cent.

In England and Wales, the persons employed were 295,629 in 1834, and 495,707 in 1850; being an increase of 200,078, or 67 per cent.

In Scotland, the persons employed were 50,180 in 1834, and 75,688 in 1850; being an increase of 25,508, or 51 per cent.

In Ireland, the persons employed were 9,564 in 1834, and 24,687 in 1850; being an increase of 15,123, or 158 per cent.

PERSONS EMPLOYED IN MILLS.

	In 1834.	In 1850.	Inc per ct.
In England and Wales.....	295,629	495,707	67
In Scotland	50,180	75,688	51
In Ireland.....	9,564	24,637	158
Total	355,373	596,082	68

MILLS IN THE UNITED KINGDOM, 1850.

	England and Wales	Scotland	Ireland	Total
Mills	3,699	550	91	4,330
Spindles	22,859,010	9,256,408	532,303	25,638,716
Power looms	272,586	28,811	2,517	298,916
Moving power, Steam (horses)	91,610	13,857	2,646	103,113
Water "	18,214	6,004	1,896	26,104

The entire moving power of steam and water is equal to 134,217 horses, which, reckoning the power of a horse to be equal to $5\frac{1}{2}$ men, shows an aggregate mechanical power used in the textile manufacture of the United Kingdom equal to 738,103 men. If we add the 596,082 human beings employed in directing this machinery, it would appear that the factories of the kingdom employ a power equal to 1,334,275 persons, besides ministering

to the support of many hundred thousands of persons in dependent and auxiliary branches of manufacture and trade.

Only one other point calls for attention, namely, the ages and sexes of the factory operatives. In 1834 there were under 13 years of age 27,774 boys and 29,681 girls—total, 56,455; in 1850, there were under 13 years 21,137 boys, and 20,638 girls—total, 40,775; showing a decrease of 6,687 boys, and

9,043 girls—total, 15,680, or 28 per cent. The effect of the Factory Acts has, therefore, been greatly to reduce the quantity of juvenile labor in the mills. This is considered by some an advantage; but in order to be sure of that, we ought to know how the children who are excluded from the mills are employed or engaged. The number of males from 13 to 18 years of age was 43,482 in 1834, and 67,864 in 1850; increase, 24,382, or 56 per cent.

In 1834, the number of females from 13 to 18 years of age was 64,726, and above 18 years of age, 103,411—total, 168,187. In 1850 no distinction was made, as all females above 13 years of age are subject to the same regulations; their number was 329,577; showing an increase above 1834 of 161,440, or 96 per cent.

The number of males above 18 years of age was 87,299 in 1834, and 157,866 in 1850; showing an increase of 70,567, or 81 per cent.

There has, therefore, been a decrease of 28 per cent. in the number of children employed between 1834 and 1850; an increase of 56 per cent. in males from 13 to 18 years of age; an increase of 96 per cent. in females above 13 years of age; and an increase of 81 per cent. in the male adults. Balance of increase on the aggregate, 68 per cent.

PERSONS EMPLOYED IN MILLS, 1834 AND 1850.

	In 1834	In 1850	Increase or decrease per cent
Children under 13 years of age	86,455	40,775	28 decrease
Males from 13 to 18 ..	43,482	67,864	56 increase
Females above 13	168,137	329,577	96 increase
Males above 18	37,399	157,866	81 increase
	355,373	596,082	68 increase

Lancashire and Yorkshire are the two great manufacturing counties, and the following are the number and classes of factory operatives found in them respectively:

Operatives in	In Lancashire	In Yorkshire
Cotton mills	215,983	18,601
Woolen "	8,816	40,611
Worsted "	1,421	70,905
Flax "	2,734	11,615
Silk "	8,208	1,688
	237,552	143,410

It may throw some additional light on the progress of our manufactures and commerce, if we state that, in the year 1833, the real or declared value of British and Irish produce and manufactures exported, was £39,667,347, and in 1849, it was £58,848,042—increase, £19,180,695, or 49 per cent.

The shipping engaged in the foreign trade of the United Kingdom in 1833, was 2,648,841 tons entered inwards, and in 1849, it was 6,071,269 tons—increase, 3,422,428 tons, or 125 per cent.

Thus our manufactures and commerce are advancing together; and all the figures we have given afford a very gratifying view of the industrial resources and prospects of the country.

NEW-ORLEANS.

—"The trade and profit of the city
Consisteth of all nations."

In relation to the subject before us—the City—we would occupy a few pages here, as we have occupied over and over again pages in the past. It is so fruitful a theme—so full of interest—so likely to excite enthusiasm and to warm up the fancies of the veriest sleeper, that one may safely approach and touch it. Poetry and plain matter of fact appear to have harmonized for once and blended into an attractive union. Shall we regard the sluggish old "ocean stream," which is winding by us, leaving our levee, leviathan-like, in its pathway to the great deep! It has been working its way onward, that old river, farther than our fancy may trace it—through all climes and lands and peoples—from where its remote source, a sleeping lake, deep set in impenetrable shades, on mountain heights, beyond all haunts of civilized life, mirrors savage and uncured beast,—it has worked itself on, "father of all waters," among mountains

"Where rolls the Oregon, and hears no sound
Save his own dashing."

through glades, over crags and precipices—now gaining breadth, now tapering and constrained again, then rushing impetuously forward—here showing limpidly a debbled bottom, there deepened and frowned upon by heights rising upon heights, rugged and snow-capped—onward, gaining in strength and in vigor, as kindred waters meet and blend and sweep on together, leaving the savage, the intractable forest and its inmates, to be cheered by sounds of busy nations of toiling men as the ocean nears at last.

Shall we regard the metropolis which the picture shows in the distance! Does it not carry us back to times long past and memories of them we would not, no never, lose! There were classic days then, when all-hearted and chivalrous Frank struggled with the savage, and won a home amid wastes and wildernesses here, and cherished in his dreams fond visions of success so hardly and so seldom won. Bienville, Iberville, D'Abadie, Baron of Carondelet, or even further still, La Salle! Venerated names—ye have struggled here—here your toils, your defeats and your triumphs—but where are ye now!

Let the gloomier times of Spanish domination come. Wasen O'Reilly in military power high over all,—an armed soldiery to crush a feigned rebellion. O'Reilly magistrate, the

noble sons of Louisiana are victims of his tyranny; O'Reilly law-giver, the province changes its institutes and its forms, and the customs of Paris yield to the statutes of Alphonso; a new government but not a new people. These times too are all past.

And they, the relics of those times; the antiquated structures which ruin has not wholly seized from us—there are such here; we would not change them, rude peasant cabins though they be. Cathedral or chapel of unclassic architecture, no matter, old Time has marked and associated his incidents with them all.

But these are panoramic scenes, and picture hurries picture on. The First Consul, Bonaparte, trafficking for Louisiana, his policy had gained but his power could not hold; Jefferson in fierce strife of hostile parties; Wilkinson and Claiborne and Burr and Livingston, and that man of iron who won immortal honor at Chalmette; our population so blended, native and foreign—all the earth represented; our commerce growing beyond comparison. Is there no incident or romance in all of this!

Such is New-Orleans, as full-fledged fancy flies; but there are those who see it not thus—men afar off, with opaque glass, discerning nought but marsh and miasma, drear abodes of vice and discomfort, blackened warehouses and mired ways. Let them come here, and we will point them to the old river and to the levee, to the old city and the new, to structures which want no magnificence, to quays which know no rest, and they will warm with us in the scenes we will show them ere they leave again.

But pardon, reader, what has been random wandering. We are not inextricably lost, and return with no great reluctance to plain sober matter of fact, which after all is more sensible.

Whatever we thought could interest in relation to this city, its history, its commerce, its life, manners, statistics, etc., as our numbers were issued, we published during the last fifteen months, and there is abundance for reflection in what we have published. Little on this head remains at this moment, but the subject grows and is not likely to be exhausted soon.

At all events, having perused the lately published works of Mr. Gayarré, we noted some things of which there is but little general knowledge, and which we doubt not, if translated, would be deemed acceptable anywhere. What we have in mind are the allusions to the early days of the city, the site of which, it would appear, was not much regarded at first, except by that wonderfully sagacious man Bienville. We introduce a passage.

Bienville wished, 1719, to remove the seat of government to the banks of the Mississippi, on the present site of New-Orleans, at the

place to which fifty men had been sent the preceding year, for clearing the ground, but was opposed by the officers who shared the command with him, and who were sustained by the commissary, General Hubert, as well as by the directors of the company. A considerable rise of the river which covered the land, the advantages of which were being discussed, determined for a moment the question. The adversaries of the project of Bienville gave as a reason, that the colony had not the necessary means of erecting the dykes with which it would be necessary to surround this settlement. Hubert wished the seat of government to be established at Natchez. L'Archambault, Villardo and Legas, whose views were rather commercial than agricultural, did not wish to leave the shore of the sea, and recommended the east coast of the Bay of Biloxi. This opinion prevailing, a detachment was sent there to build houses and barracks. This place was called New Biloxi, to distinguish it from the first settlement, which was afterwards called Old Biloxi.*

Three years after this, 1722, Bienville being then at Mobile, wrote to the ministry complaining of the position at Biloxi, and showing the advantage of one selected on the Mississippi river. We translate this dispatch:

"I have had the honor of giving the Council information, by my last letters, as to the entrance of the river, and of assuring it that vessels drawing less than thirteen feet of water can enter, full sail, without touching, and that it will not be difficult to make the pass practicable for larger vessels, as the bottom is soft and moving. I would have commenced operations there before, if the engineers specially charged with such work had been of the same opinion; but they are occupied altogether with those of Biloxi, which, I believe, we will be obliged to abandon. If we continue to make our discharges there, the settlement of the colony will be retarded, and we must make great outlays on account of the distance from Ship Island, which is five leagues from the main land where we are settled. We are obliged, in order to discharge the vessels, to send out lighters, which on their return cannot approach the land nearer than three quarters of a league. Then we must send out boats to discharge these lighters, and these boats are grounded a rifle-shot from shore. The Council will thereby know of what importance it will be for all the vessels from France to enter the river, where they may be discharged in two days. I have sent thither two ships, one of three hundred, and the other of four hundred tons, and they have gone in full sail. I would have done the same with others which have just arrived, if precise orders had not been

* Hist. Loula. par Chas. Gayarré.

given for discharging these vessels at Biloxi.*

In the year 1760 the following was a faithful picture of the most important part of the city, the public structures, etc.:

The situation of the public buildings at this time—1760—was as follows: The old Barracks were between Royal and Bourbon, Toulouse and St. Louis streets. The old Government House occupied the ground now comprised between Customhouse and Royal streets. Chartres street stopped at Bienville street, and led to the Government House. The new Government House, in 1760, was at the corner of St. Louis and Levee, towards Toulouse, and took up about one third of the square, but its front on St. Louis street took up one half of the square. At the opposite corner was the Intendance. The present Hospital street, or Bayou road, came no nearer to the river than Royal street, where it ended in the Army Hospital, which extended to Quartier, Ursuline, Levee and Royal.—2d vol.

From a very eccentric volume, published some years ago, which, with not a little that is wild and whimsical, contains much that is sensible and interesting, we take the liberty of transcribing a page or two. The pictures which will be given are truly drawn, and so far as we give them may be relied upon. With the extracts the reader will permit us to retire. And first we have an introduction to the city:

"By whatever route the traveller approaches New-Orleans, whether by the river, the sea or lake, the feature which first attracts his attention is its Levee, where one may meet with the products and the people of every country in any way connected with commerce than its upper or most southern extremity.

"Levee is a French word, of primary importance within the state of Louisiana: it pervades its statute-book, and is daily heard within its halls of justice. 'There is little or no land,' says Judge Porter, 'on the banks of the river, within this state, if we except an inconsiderable quantity in the neighborhood of, and above Baton Rouge, which would not be covered with the waters of the Mississippi in the spring months, were it not for the artificial embankment which the industry of man has raised to exclude them.' Thus the Dutch are not the only people who have won their domain from the watery element. The state of Louisiana, when we consider its recent existence, the paucity of its population, and that population sparsely scattered over a large extent of country, has done more than Holland: yet we overlook the wonder which lies at our own door, to lose ourselves in admiration of the not greater wonder three thousand miles off.

"The traveller from the north, as he

touches the region of the orange and cane, of smiling plantations, bounded in the background by dense forests, and stretching onward to a seemingly illimitable extent towards the south, and looks down upon the planter's mansion, the cluster of white cottages hard by, the slave at his daily task, and the mounted overseer, as one would look down from a balcony upon the busy street below, appears first to be made conscious that the Mississippi, the father of waters, the receiver of so many mighty rivers, is here, near the close of its course, where its stream is most rapid, controlled by the puny hand of man,—that the ocean-stream upon whose bosom he is floating, here restricted, hemmed in, and directed, sweeps down to the sea over an artificial ridge, and that he is passing through a huge aqueduct, which raises the dweller upon water above the dweller upon land! Here the waves do indeed bound beneath him as a steed that knows his rider, yet the traveller sees, admires, and forgets. But if he forgets *the whole*, he cannot forget *the part*: when once seen, once remarked, he cannot forget *the Levee* of New-Orleans, the storehouse of the great Valley of the Mississippi, the receptacle of the products of a hundred climes, of a country extending from the frigid to the torrid zone, illimitable in resources as almost illimitable in extent; the goal of a thousand steamboats, and of more than a thousand merchantmen; the exchange, the place of purchase, of sale, and of barter; the huckster's shop, the news-room, and the Prado of the greatest exporting city in the world."

We have the following graphic sketch of the Levee and of the scenes constantly presented upon it:

"The Levee of New-Orleans is one continued landing-place or quay, four miles in extent, and of an average breadth of one hundred feet. It is fifteen feet above low water mark, or that stage of the river when its waters retire wholly within their natural bed; and six feet above the level of the city, to which it is graduated by an easy descent. Like the river it margins, it holds a serpentine course, advancing or receding, as the Mississippi encroaches upon the city, or falls off towards the opposite bank. It is constructed of *deposit*, a rich alluvion swept from the north, and held in suspension by the waters of the Mississippi until their rapidity is checked by a sudden change of direction, or, swollen to overflowing, they spread over the adjacent swamps, again to retire, and again to bless the land they have visited with an increase of soil. The deposit is so great, and the consequent formation of new land so rapid, immediately in front of that portion of the quay which is most used for the purposes of commerce, that it has within a few years become necessary to build piled wharves, jutting out from fifty to one hundred feet into the river,

* Hist. Louis. I.

The new formation, which is governed as to its locality by what may well be termed the freaks of the Mississippi, is called "batture;" and when it has progressed to such an extent as to be left bare by the retiring water at its lowest stage, is held capable of ownership: a sort of property which has given birth to an indefinite amount of long-continued, intricate, and vexatious litigation, dating from the first appearance of the late Edward Livingston in the courts of Louisiana up to the present moment."

The flat-boat commerce of the city is thus portrayed:

"And here one may see what New-Orleans was before the application of steam to navigation. Hundreds of long, narrow, black, dirty-looking, crocodile-like rafts lie sluggishly, without moorings, upon the soft batture, and pour out their contents upon the quay: a heterogeneous compound of the products of the Upper Mississippi and its tributaries. These rafts or flat-boats, as they are technically called, are covered with a raised work of scantling, giving them the appearance of long, narrow cabins, built for the purpose of habitation, but designed to protect from the weather a cargo often of the value of from three to fifteen thousand dollars. They are guided by an oar at the stern, aided with an occasional dip of two huge pieces of timber, which move on either side like fins, and float with the stream at the rate of three miles the hour. Such was the carriage of the products of the up-country twenty years ago! Their number has not been diminished by the introduction of the steamboat. It is, indeed, a natural, simple, and cheap mode of transportation; and as long as the Mississippi passes with such rapidity from its source to its embouchure in the gulf, the traveller will meet with these mighty masses floating on its bosom, swayed to and fro by its currents, counter-currents, and eddies, often shifting end for end, like some species of shell-fish, and not unfrequently, like the crab, preferring the oblique to the forward movement. Yet hundreds are at times sunk by sudden squalls, and of the many freighted in the up-country, perhaps not more than two thirds ever reach New-Orleans. The insurance offices look upon them as very unsafe bottoms.

"Of the many which lie before me, grounded upon the batture, some are filled with fat cattle, whose lowing discourses eloquently of the distant pastures of the north. The states of Kentucky, Indiana, Illinois, Missouri, Arkansas and Louisiana, and the republic of Texas, annually send more than twenty thousand head of horned cattle to this market. Arkansas, Missouri and Texas raise numerous herds, which run wild over their extensive prairies, and are tamed and caught with salt. Kentucky, with greater progress in the arts of husbandry, pastures and stalls its beef,

which consequently bears off the palm for size, condition and general excellence. Others are freighted with horses, mules, and sheep; corn in sacks or in bulk, and upon the cob—a method of transportation which has its advantages, what is lost in stowage being gained in protection from must and rot.

"Here is a boat stowed with apples, inferior enough in quality, cider cheese, potatoes, butter, chickens, lard, hay—coarse, the rank growth of a virgin soil—all offered for sale, in the mass or by the lot. Pork, alive, in bulk, in barrels, fresh, salted, smoked, of all sizes and conditions; the corn-fed fatness of Ohio, and the lean acorn-growth of Illinois. Were Judaism to prevail, where would be the greatness of Cincinnati? Flour from Virginia and Ohio, old and new, sweet and sour; the leading breadstuff, yet the most fickle in price: cotton from Arkansas and Mississippi, lumber from Tennessee, whiskey from Missouri, tobacco from Kentucky, twice founded, twice drenched, to be here dried, cured anew, disguised and re-packed, close the list.

"But the men who make these things of wood their dwellings; who launch them upon the Ohio, the Illinois, the Upper Mississippi, the Missouri, the Arkansas, and the Cumberland, with all their tributaries, and guide them to this their final resting-place, should not be forgotten. They are a distinct class of beings, livers on the water, known and designated as 'boatmen of the Mississippi,' an expression which embraces all that is strong, hardy, rough, and uncouth, with much that is savage, wild, and lawless. They cannot be supposed to have been born in habitations constructed for so temporary a purpose, yet the congeniality of their dispositions with their situation and employment might justify one in suspecting that their mothers, like Antonia Perez, often visited the scenes of their husband's labors."

The steamboat landing:

"That part of the quay which is peculiarly characteristic of New-Orleans, I mean the steamboat landing. Here all is action: the very water is covered with life. Huge vessels float upon its bosom, which acknowledge none of the powers of air, and wait no tide. One is weighed down to the guards with cotton—a freight of three thousand bales—one hundred and eighty thousand dollars! Twenty more lie side and side, laden with the same precious, gambling, national, ruinous commodity. The twenty-first has just arrived, and is puffing, blowing, and wheeling in the stream, seeking a mooring. She is covered all over; a mountain of cotton! Does its consumption keep pace with its growth? What will be the effect of bringing into cultivation all the productive land of Mississippi, Arkansas, Alabama, Louisiana, and Texas? Terra ingens et interminata! The southerner may well tremble for the future: a market glutted without the possi-

bility of a recovery from the surfeit. The planter can never grow silk; that requires a poor, dense, white population; and he can never grow wine, for his soil will produce none but an inferior grape, which will not cover the cost of slave labor.

"Huge piles, bale upon bale, story above story, cover the Levee. A gang of negroes is still adding to a heap of ten thousand, unguarded, unprotected; the winds fan it, the rains beat upon it, the sun bleaches it, the bagging and the rope rot and fall off; a consignee at Liverpool, who is accustomed to handle the commodity so preciously, would run stark mad with imagining one half of what is here to be seen.

"Pork without end, as if Ohio had emptied its lap at the door of New-Orleans. Flour by the thousand barrels; rolled out upon the quay, heaped up, pounced upon by the inspector, who pierces each through and through with a long hollow tube, well calculated to bring away his perquisites. A large area is covered with these two products of the up-country, and still appears seemingly undiminished, although the seller, the buyer, and the drayman are busy in the midst of it.

"Here is a boat freighted with lead from Galena: another brings furs and peltry from the head waters of the Missouri—three thousand miles to the northwest! When I contemplate the vast region of country which is now just opening to cultivation, and of which New-Orleans is the natural mart, I find it impossible to set limits to the city's future increase; how can I resist the conclusion that at some, and not very distant day, northern products will be here collected in such quantities as will reduce its present great staple of export to an inferior rank in mercantile importance!"

The ship Levee at twilight:

"The sun is just dipping into the west, and the broad bosom of the Mississippi is bright with its departing rays, which dance upon its surface, as upon a mirror quivering in the breeze. The busy hum of life is hushing to repose, the whole scene grows mellow, and man, with all of nature, puts on a softer aspect with the closing in of night. A light south wind comes gently from the gulf, scented with the sea. All that man has done, and all that man is, is before me. The merchantman and the steamship tell the whole story of art, of science, and of luxury; of discovery and invention; of the interchange between nations, imparting knowledge, harmonizing manners, creating refinement; of the exchange of the products of distant climes, supplying nature, and feeding artificial wants; of all that has been since 1492. The Cathedral bells are chiming to vespers; the flags of every nation—our own, the English, the French, the Spanish, the Dane, the Russian, the Swede, the Hollander, the Free Cities—are run to the mast-

head to salute the setting sun. That custom speaks; the most ignorant sailor understands it; and, as he sees the shade cover the hull, and creep upward till the colors of his country are alone bathed in light, while all beneath is dark, his better feelings gush forth in worship without form.

"I have chosen this hour to visit that portion of the quay which is appropriated to foreign and coastwise shipping, because it is at this hour that the *story* partially changes its character, and assumes the appearance of a *prado*. The dull, dusty, dirty routine of business is the same throughout its whole extent. The interminable chant of the negro, with its full, sonorous chorus, is here supplied by the hearty 'Heav-yeo-up!' of the sailor; and the cotton-bale, tobacco-hogshead, and whiskey-barrel yield to bales of foreign and domestic manufactures, pipes of wine, and crates of ware.

"The shipping stretches away from the point at which I stand as far as the eye can reach, two miles in extent, three tiers deep, with their heads to the current, curving with the river—a beautiful crescent. The bosom of an American heaves with honest pride as he looks upon the city, and this its chiefest ornament—the work of only thirty years! The last of sunlight has disappeared; the merchant, weary with the day's activity, thoughtful, stooping, his eyes bent upon the ground, hurries homeward, calculating his profits. "Y-augh! y-augh! y-augh!" a gang of negroes, ever merry—there is not a surer test of happiness than uniform hilarity. Next come some half dozen sailors, in tarred hats, clean check shirts, white trousers and slippers. They have just arrived, have just received the little money due them, and are just starting into the city with a sober gait, and an honest, open face, to see life, and get rid of their seelags.

"There is no twilight at the 30th degree north latitude. That sweetest of the sister hours—that hovering between light and darkness, in summer so mild, in winter so brilliant, at all seasons of the year so tranquillizing to those whose feelings have been set on edge by the past day's homely labors, is here unknown; and already the stars begin to twinkle forth, one by one, bright and unobscured by vapor. New-Orleans, though lapped in swamp, possesses a pure atmosphere."

The habitation of the dead,—for this is life, —to die:

"New-Orleans has five cemeteries; of these the Catholic and two Protestant are unique in plan and method of interment. Each is inclosed with a brick wall of arched cavities or ovens, as they are here called, made just large enough to admit a single coffin, and raised, tier upon tier, to a height of about twelve feet, with a thickness of ten.

"The whole inclosure is divided into plats, with gravel paths intersecting each other at right angles, and is densely covered with tombs, built wholly above ground, and from one to three stories in height. This method of sepulture is adopted from necessity, and burial under ground is never attempted, excepting in the 'Potters' Field,' where the stranger without friends, and the poor without money, find an uncertain rest, the water with which the soil is always saturated, often forcing the coffin and its contents out of its narrow and shallow cell, to rot with no other covering than the arch of heaven.

"The cemetery in which I now stand looks as if modelled after a growing city. The tombs have an air of freshness about them which betrays their newness—nothing seems of yesterday; the peculiarity of their structure, their close juxtaposition filling the plats like blocks of buildings, the well-gravelled paths between, the wall about the whole, with its numerous receptacles for the dead rising story above story, check the fancy, and almost persuade the visitor to believe he stands in the midst of a panorama of what the great mart

which feeds it is to be. Even the little slabs of black and white marble, affixed like door-plates to the mouths of the tombs, carved with the names of their occupants, giving dates of birth and death, help out the illusion—they were all so young, one can hardly believe them to be of the dead! Yet that fact tells a world of sorrow, and discourses more eloquently than could the most gifted tongue, of the true character of that city, which here finds its final resting-place—its comparative newness, its advantages of trade, the great influx of aspiring youth, the periodical visit of the destroyer; the periodical passing away of thousands in the bloom of life, while more than thousands rush in to fill their places, again to pass away—again to be more than supplied by new adventurers: thus running a continual round; a race after death, while New-Orleans, unchecked, strides onward towards the goal of its destiny. Is man, with all his intellect, a play-thing in the hands of fate? Mephistopheles would laugh till his sides cracked amid the tombs of the cemeteries of New-Orleans."

NEW-ORLEANS.—CUSTOM-HOUSE REVENUES, &c.

EXPENDITURES ON THE NEW-ORLEANS CUSTOM-HOUSE EDIFICE.

In 1807-8-9.....	\$19,200 00
In 1820.....	80,081 88
In 1840.....	5,500 00

\$104,781 88

MINT AT NEW-ORLEANS.

Buildings, machinery, contingent expenses, and machinist, &c..	\$507,468 55
Officers and clerks.....	118,860 51
Laborers.....	152,306 72

\$778,630 78

MARINE HOSPITAL AT M'DONOUGH.

Expenditures thereon.....\$88,121 07

I append to these topics of local interest a statement of the mileage allowed to members of Congress, at different periods, and in the aggregate:

First Congress, ending 3d March, 1790.....	\$825,202 97
Fifteenth Congress, ending 3d March, 1819.....	626,242 50
Twenty-ninth Congress, ending 3d March, 1847.....	1,809,437 00

Aggregate mileage of members of Congress, from the First to the Twenty-ninth Sessions, both inclusive, \$19,100,445 48.

LAND OFFICE, NEW-ORLEANS.

	Receipts.	Expenditures.	Net Receipts	Rate per cent. of exp. on amt. of receipts.	Excess of exp. over receipts
1821.....	\$48,300 00	\$733 46	\$47,466 54	1.53	—
1822.....	100,132 03	1,904 67	98,227 36	1.90	—
1823.....	432 25	1,783 93	—	412.94	\$1,351 68
1824.....	—	1,000 00	—	—	1,000 00
1825.....	500 00	831 31	—	166.36	331 31
1826.....	746 37	1,514 92	—	203.07	768 55
1827.....	134,451 00	4,316 93	130,134 07	3.21	—
1828.....	—	2,031 79	—	—	2,031 79
1829.....	400 00	1,008 00	—	252.00	608 00
1830.....	9,101 37	1,823 09	7,278 28	20.03	—
1831.....	13,910 00	2,519 73	11,390 27	18.11	—
1832.....	1,552 75	1,076 38	476 17	69.36	—

RECEIPTS AND EXPENDITURES OF PUBLIC LANDS, FROM MARCH 4, 1789, TO JUNE 30, 1845.

Receipts.	
Receipts during said period.....	\$127,144,820 67
Expenditures	
Pertaining to General Land Office.....	\$1,877,574 24
" to Surveys.....	3,941,121 28
On account of private land claims.....	422,932 64
For sundry purposes pertaining to lands.....	1,973,726 40
For surveys general, repayments and patents.....	1,174,133 58
Miscellaneous.....	51,690 34
Relating to treaties for Indian lands.....	44,699,902 15
Under the Convention with France, of the 30th April, 1803, &c., for Louisiana.....	15,000,000 00
For interest on stock thereupon issued.....	8,392,353 43
Under treaty with Spain, of 30th February, 1819, for the Floridas.....	5,000,000 00
For interest of stock thereupon issued.....	1,499,768 66
Amount of 3 and 5 per cents., estimated upon the proceeds of public lands within their borders, and paid to the states for aiding them in internal improvements, in consideration of the U. S. not having paid taxes on the public lands, &c.....	8,361,847 63
Amount of proceeds of public lands, paid to the several states and territories, under the Act, 4th September, 1841.....	543,858 79—87,965,909 14
Net proceeds.....	\$39,878,411 53

OPERATIONS OF N. O. CUSTOM-HOUSE FROM 1801 TO JUNE 30, 1847, BOTH INCLUSIVE.

Receipts.	
Duties on merchandise.....	\$47,132,567 03
" on Mediterranean fund.....	217,525 32
" on tonnage.....	668,867 05
Passports and clearances.....	20,416 00
Light money.....	246,348 39
Fines, penalties, and forfeitures.....	182,494 31
Surplus of official emoluments.....	45,279 19
Unclaimed merchandise.....	10,076 96
Marine hospital money.....	131,300 81
Amount received from captors, being net proceeds of prize vessels and goods.....	3,495 37—48,668,370 42
Disbursements.	
Debentures issued, and drawbacks on foreign merchandise exported.....	11,688,664 81
Drawback on Mediterranean fund.....	24,973 39
" on domestic refined sugar exported.....	138,738 16
Bounties on salted provisions and fish.....	944 55
Expenses attending prosecutions.....	40,793 90
Total tonnage and light money.....	35,213 86
All other duties refunded.....	957,584 38
Expenses of collection.....	2,802,887 94—15,689,800 94
Net revenue.....	\$32,968,569 48

Statement of the Receipts, Expenditures, Net Revenue, and excess of expenses of Collection of all the Custom-houses in the Union, from March 4, 1798, to June 30, 1846.

Receipts.	
Duties on merchandise.....	\$1,180,326,705 08
" on Mediterranean fund.....	8,703,530 30
" on tonnage.....	7,121,531 92
" on passports and clearances.....	457,023 76
" on light money.....	1,222,348 93
Fines, penalties, and forfeitures.....	1,949,323 19
Unclaimed merchandise.....	153,979 81
Interest received on treasury notes.....	90,346 01
Custom charges on British vessels.....	1,932 95
Sales of revenue cutters.....	10,444 17
Debentures over issued.....	221 63
Surplus of official emoluments.....	303,242 48
Expenses on collection of the revenue, and allowances to vessels employed in the fisheries overpaid.....	937 49
Marine hospital money.....	2,549,460 95
Amount received from captors, being net proceeds of prize vessels and goods.....	218,822 14
Amount for lands set off to the U. S. on account of bonds, &c.....	5,101 43—1,143,114,953 17

Expenditures.

Debiture issued, and drawback on foreign merchandise exported.....	193,103 577 56
Drawback on Mediterranean fund.....	1,041 983 98
" domestic distilled spirits exported.....	1,154,926 41
" refined sugar exported.....	2,892,795 70
" manufactured snuff exported.....	20,547 26
Allowances to vessels employed in the fisheries.....	8,634,175 96
Bounty on salt provisions and pickled fish.....	721,533 48
Expenses attending prosecutions.....	644,558 43
Interest paid on treasury notes.....	45,890 43
Duties refunded on unclaimed merchandise, insolvencies, &c.....	5,305 21
" on Mediterranean fund.....	46 06
" under the Act to remit duties on goods destroyed by fire in New-York.....	176,307 75
Duties refunded on railroad iron.....	3,324,047 17
" on all other articles.....	10,219,864 30
" on total tonnage and light money.....	110,261 02
Total expenses of collection.....	46,527,825 78— 268,584,894 51
Net revenue.....	\$874,520,127 66
Net revenue.....	\$882,894,036 05
Deduct excess of expenses of collection.....	8,373,910 39
True amount of net revenue.....	\$874,520,127 66

NEW-ORLEANS.—VITAL STATISTICS.

Our friend, Dr. Fenner, of this city, who has been preparing some able and most laborious articles for the *Medical Journal* upon Yellow Fever, furnishes the following statistics. They are taken from the books of the Charity Hospital, which he considers "the most extensive fever hospital in the world."

ADMISSIONS IN THE CHARITY HOSPITAL.

1841.	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.	Total
Intermittent Fever...	3	27	35	39	28	65	187	151	18	66	93	72	794
Yellow Fever.....	—	—	—	—	—	—	—	174	642	252	87	8	1,118
1842.													
Intermittent Fever...	45	29	35	39	45	124	160	169	144	140	110	61	1,092
Remittent Fever.....	4	—	1	3	4	8	13	34	41	35	11	3	155
Yellow Fever.....	—	—	1	—	—	—	47	247	98	28	—	—	410
1843.													
Intermittent Fever...	31	30	35	31	19	40	70	98	128	136	149	76	848
Remittent Fever.....	1	—	—	1	—	9	40	75	49	12	8	10	205
Yellow Fever.....	—	—	—	—	—	—	23	188	365	351	111	15	1,053
1844.													
Intermittent Fever...	66	49	41	32	44	75	176	258	255	261	216	116	1,589
Remittent Fever.....	2	4	2	1	4	24	30	47	67	55	5	3	244
Yellow Fever.....	2	2	—	—	—	1	1	1	68	52	25	—	152
1845.													
Intermittent Fever...	7	75	57	44	79	112	145	96	279	196	189	124	1,408
Remittent Fever.....	3	1	—	1	11	17	38	34	33	17	—	—	154
Typhoid Fever.....	7	6	5	3	10	8	11	14	18	20	15	23	139
Yellow Fever.....	1	—	—	—	—	—	—	—	—	—	—	—	1
1846.													
Intermittent Fever...	79	58	75	76	85	138	214	227	359	376	310	81	2,078
Remittent Fever.....	3	3	5	—	7	6	2	9	22	36	7	3	103
Typhoid Fever.....	30	13	7	5	10	12	14	17	5	7	23	52	195
Yellow Fever.....	—	—	—	—	—	—	—	—	29	33	32	4	148
1847.													
Intermittent Fever...	144	117	98	153	140	211	228	74	53	258	380	341	2,192
Remittent Fever.....	4	1	4	9	17	38	69	64	25	12	18	3	269
Typhus and Typhoid.	40	23	54	180	231	389	64	3	1	10	160	347	1,502
Yellow Fever.....	—	—	—	—	—	5	148	1,611	777	219	49	2	2,811

Whole number of diseases admitted into the Hospital, 1841, 4,380; of fevers, 1,991. 1842, 4,404; of fevers, 1,758. 1843, 5,013, 2,222. 1844, 5,346, 2,207. 1845, 6,136, 1,763. 1846, 8,044, 2,603. 1847, 11,890, 6,901 fevers.

NEW-ORLEANS.—VITAL STATISTICS, ETC.
 —The average age at death, in the northern cities (doubtless owing in a great measure to the large mortality in infantile life) is from nineteen years nine months to twenty years three months; and in some of the cemeteries, where destitute foreigners from the crowded city of Boston are buried, it is reduced to 18.49. In the south, where it is so much more favorable to infantile life, the average age is much

greater. In Charleston, the average age at death is near thirty-six. In Vera Cruz 24.6, and in the City of Mexico 27.7; while in New-Orleans, the average age at death for the last year was 26.69, and in a series of years the aggregate of all the cemeteries was 22.63. But to show the different influence of our climate upon the various classes of the population, the following table was constructed at great labor, (being all the data it was possible to procure :)

Cemeteries.	Years embraced.	Tot. No. deaths.	Ratio av. age at death.	No. above eighty.	No. above one hun.	Gen. av.
Catholic cemetery.....	1841—'4,	442	26 y. 8 m. 1 d.	51	10	22.63
Protestant do.....	1841—'9,	1,445	24 9 1	15	1	
Potter's Field do.....	1841—'6,	8,566	23 10 4	33	9	
Cypress Grove do.....	1841—'8,	906	23			
St. Vincent de Paul do....	1842—'6,	1,152	20 5 14	16	2	
St. Patrick's do.....	1841—'7,	1,287	19 1			
Jews' do.....	1847—'9,	70	14 1			

"Of all countries on record, the rural parts of England and Massachusetts are, probably, most favored with respect to infantile life; and yet, in Massachusetts forty per cent, and in England forty-seven per cent, die while they are going through the process of development, and before they enter upon self-sustaining life, in their sixteenth year. In New-Orleans we have not the data to institute an exact comparison at these ages, but very near it; and we find that here only 36.98 per cent die under twenty. In this city data of all kinds are very defective; we have, nevertheless, been able to construct a chart to show the real value of life here at successive ages, and at different periods of the year. It is too lengthy for this report. We may, however, state that it shows the extremely mild character of the climate at all periods of life under twenty and above fifty, and during all months of the year, and that the chief fatality occurs from twenty to forty, (the ages of the emigrating population,) and the period the latter part of summer. Notwithstanding all this, the following statement shows, that we have a larger proportionate population at the productive age, that is, from twenty to fifty, than the most favored parts of the world. Thus, in the United States, there are 8,708; in Louisiana, 3,753; in England, 4,028; in New-Orleans, 4,924.*

	White.		Colored.		Total.
	Male.	Female.	Male.	Female.	
10 yrs.,...	154	117	36	35	342
20 yrs.,...	255	189	78	58	580
30 yrs.,...	1,353	435	126	78	1,991
40 yrs.,...	1,125	330	87	61	1,603
50 yrs.,...	561	159	54	59	833
60 yrs.,...	222	84	28	48	382
70 yrs.,...	102	37	19	34	192
80 yrs.,...	88	31	13	19	101
90 yrs.,...	8	14	11	15	48
100 yrs.,...	7	4	2	13	29
105 yrs.,...			1		1
110 yrs.,...				1	1
115 yrs.,...				1	1
120 yrs.,...				1	1
Unknown,...	818	338	325	206	1,862

Total..... 3,862

PLACE OF BIRTH.

Foreign.....	3,569
United States.....	505
Louisiana.....	29
New-Orleans.....	774
Unknown (including negroes),	4,985

UNKNOWN.

As to age.....	1,632
" disease.....	645
" country.....	4,985
" residence, either as to length, or what part of the city, etc., so few as to be useless.	

BURIALS AT THE CEMETERIES.

Protestant.....	371
Catholic.....	985
Cypress Grove.....	182
Odd Fellows'.....	5
St. Vincent de Paul.....	2,438
St. Patrick's.....	1,145
Potter's Field.....	1,451
Charity Hospital.....	2,304
Lafayette.....	981

MORTALITY OF NEW-ORLEANS, 1849.

AGGREGATE OF ALL THE AGES KNOWN OF THE MORTALITY OF 1849.

	White.		Colored.		Total.
	Male.	Female.	Male.	Female.	
1 mo.,....	300	179	74	65	618
1 yr.,....	248	225	84	57	614
5 yrs.,....	367	336	98	102	908

* Dr. Barton is wrong in attaching any importance to this, as a few moments' reflection will satisfy him.
 —Ed.

NEW-ORLEANS.—IMPORTS FROM THE INTERIOR, FOR TEN YEARS,* FROM THE 1ST SEPTEMBER TO THE 31ST AUGUST, IN EACH YEAR.

ARTICLES.	1850-1.	1849-50.	1848-9.	1847-8.	1846-7.	1845-6.	1844-5.	1843-4.	1842-3.	1841-2.
Apples.....bbls.	54808	37344	54987	30518	30612	26775	26515	43069	67803	26443
Bacon, ass't. casks, &c.	48602	32830	32016	45119	36932	25213	12892	19563	16562	13505
Bacon.....bbls. & boxes	9274	29941	32156							
Bacon Hams.....lbds.	44478	19335	19831	18539	14518	12092	8358	19070	13588	9290
Bacon in bulk.....lbs.	235000	209045	217000	281140	425163	492700	350000	1203821	1433796	1288109
Bagging.....pieces.	72304	58321	72941	77682	60982	96601	111324	109216	89721	60307
Bale Rope.....coils.	107224	86104	93322	74325	56291	56678	67600	82694	80992	63307
Beans.....bbls.	4236	9307	13157	20485	24536	16585	7006	7619	8878	10993
Butter.....kegs.	54967	51038	57972	45213	51384	44172	30319	18831	16530	11791
Butter.....bbls.	5729	1772	2144	1150	872	1494	390	500	804	284
Beeswax.....bbls.	230	367	481	608	1109	1290	1464	1911	983	343
Reef.....bbls. & tierces.	48066	63271	70500	50260	53968	62223	32674	49363	17549	17455
Beef, dried.....lbs.	15300	48219	20300	56100	49000	98290	58200	55610	51400	60812
Buffalo Robes.....pcks.	155	358	23	14	55	1031	1915	5445	5135	2122
La. & Miss. bales.	618156	474411	811905	883144	453842	765315	688244	627769	824045	683928
Lake.....	14399	10902	15781	13734	4356	14276	19533	12234	14280	8907
N. Al. & Ten. "	236821	249083	217078	227561	211502	222677	198246	160334	191410	118629
Arkansas.....	62793	44890	46733	64294	35179	34876	23103	21835	30511	16734
Montgomery, &c. "	18051	17501	9839							
Mobile.....	24473	23647	25325	10857	16379	6356	12123	47596	10687	4585
Florida.....	11091	10601	5065	4208	16966	5884	12830	12916	3381	2831
Texas.....	9252	6088	11356	10007	2345	4349	25159	18170	15328	5101
Corn Meal.....bbls.	3662	5187	12097	47543	89159	39005	7017	3769	5415	6023
Corn in ears.....	42536	49719	205711	509383	619756	355573	139698	165354	255056	240675
Corn, shelled.....sacks	1289932	111497	1706312	1083465	2286310	1166130	300964	360052	427532	338709
Cheese.....boxes	78894	63809	54287	52702	57429	67392	39001	12583	3562	2710
Candles.....	80748	53306	28362	16750	8490	10461	5170	3913	1201	3593
Cider.....bbls.	245	903	1189	344	477	135	385	1419	1036	1130
Coal, western.....	700000	600000	315000	320000	356500	262000	281000	227788	255598	140582
Dried Peaches.....	2685	934	469	385	3069	137	474	1112	718	863
Dried Apples.....	4168	2065	2495	1173	5761	930	1738	829	958	1115
Flaxseed.....tierces	204	217	1188	4303	963	823	2121	4273	13480	863
Flour.....bbls.	1041106	501966	1013177	706958	1617675	837965	533312	502507	521175	439688
Furs.....bbls., bks., bbls.	1289	444	900	411	328	637	689	539	303	1837
Feathers.....bags.	3648	5000	3939	2594	3498	4667	5403	4568	1484	1737
Hemp.....bales.	25116	34702	19536	21584	60238	36080	46274	32602	14873	1211
Hides.....	140338	43542	30570	47662	98342	112913	117863	76400	45557	26160
Hay.....bales.	42821	56258	54241	61934	93231	71279	37296	35132	28959	20166
Iron, Pig.....tons.	152	20	413	701	1151	1083	397	100	211	322
Lard.....bbls.		215	790	459	143	45	167	212	1433	74
Lard.....tes. & bbls.	115570	228010	214362	216031	117077	107639	69078	119717	104540	12907
Lard.....kegs.	151931	302360	275485	303661	275076	334909	245414	373341	307871	366094
Lime, western.....bbls.	37738	33060	10410	14920	3094	8387	6233	3767	1159	830
Lead.....pigs.	325505	415400	508557	606066	650129	785394	732125	639209	571949	472556
Lead, bar.....kegs.	629	631	949	787	1291	1431	788	851	701	1084
Lead, white.....	1930	5979	7795	9203	11680	7853	888	30	50	592
Molasses.....bbls.	184483	189813	155807	159400	91710	132363	105086	64852	66183	69104
Oats.....bbls. & sks.	479741	325795	206559	467217	588337	309366	144962	1204432	120430	63281
Onions.....bbls.	14279	13024	6898	7990	7185	6079	7409	6443	4614	3338
Oil, linseed.....	178	1098	1409	2227	3637	1135	1356	2260	1356	305
Oil, castor.....	4145	2091	2628	1199	1439	2379	3365	2757	4076	3668
Oil, lard.....	17157	14712	8842	5401	2573	2066	2413	2647	1818	
Pickles.....kegs & bbls.	893	243	630	505	648	1316	218	1154	445	140
Potatoes.....	162922	166003	146116	161801	142888	107058	53779	56587	48060	52601
Port.....tes. & bbls.	286084	543094	550643	356480	302170	369091	216960	412928	204643	244442
Pork.....boxes.	1980	15695	18279							
Pork.....bbls.	1231	13968	18499	14201	9452	9988	6741	8800	2371	940
Pork in bulk.....lbs.	10512395	15862431	10273680	13564430	8450700	9740752	4079000	7792000	6814750	4051800
Porter and Ale.....bbls.	384	804	1838	3492	1263	231	86	604	1050	514
Packing Yarn.....reels.	4190	4131	2211	3333	2193	1180	110	1164	1465	2099
Skins, Deer.....pcks.	1119	1375	1301	136	1784	4360	2729	1939	1496	3219
Shot.....kegs.	2044	4435	4377	5258	3992	3103	4105	4714	1588	3416
Sugar.....bbls.	126755	143912	125592	128112	82011	98109	93288	51816	65030	50920
Sugar.....bbls.	18675	17305	5879							
Soap.....boxes.	9484	9930	6520	5580	4361	3633	6076	7299	2627	1932
Shingles.....	50009	70000	80000	60000	147000	13000	144000	361561	147000	114009
Staves.....	2000000	6000000	3800000	2600000	2000000	5670000	2500000	1302678	1185400	425000
Tallow.....bbls.	6164	4862	5622	4357	6658	855	7828	7323	6995	5071
Tobacco, leaf.....bbls.	64030	60304	52335	55882	55588	72890	71493	82455	92500	67555
Tobacco, chew.....kegs.	4115	2021	2315	6390	3930	3040	5369	7695	4902	2618
Tobacco.....bales.	220	153	33	118	1001	1105	8799	4771	3008	3229
Twine.....bundles.	3150	2118	2087	2264	1285	734	1951	2099	1903	1176
Whiskey.....bbls.	157741	117753	125629	135333	126553	117104	97651	80947	83597	65345
Window Glass.....boxes.	16428	4887	675	4200	3805	2831	8071	2966	2242	2761
Wheat.....bbls. & sacks.	88797	57508	238911	149181	83949	403786	64559	86014	118248	24886

* For the Commerce of 1851-2, see Appendix.

NEW-ORLEANS.—EXPORTS OF FLOUR, PORK, BACON, LARD, BEEF, WHISKY, CORN, FOR TWO YEARS, FROM 1ST SEPTEMBER TO 31ST AUGUST.

PORTS	1850-51.						
	Flour, barrels	Pork, barrels	Bacon, hds	Lard, kegs	Beef, barrels	Whisky, bbls	Corn, sacks
New-York	72,584	55,849	9,856	209,825	3,055	1,881	160,728
Boston	88,925	77,806	6,503	224,388	13,485	2,242	32,461
Philadelphia	418	5,538	2,763	41,045	421	268	9,477
Baltimore	—	13,421	1,843	32,585	955	1,542	—
Charleston	6,175	1,003	2,872	2,769	119	11,514	23,978
Other coastwise ports ..	150,960	22,890	19,972	40,046	3,785	50,383	150,125
Cuba	206	970	1,513	122,268	71	—	94,198
Other foreign ports ..	264,150	15,260	919	66,085	20,574	62	64,420
Total	583,418	192,737	46,241	738,956	42,415	67,392	535,882

In the above, the exports to Mobile, &c., via the Pontchartrain Railroad and New Canal, are included.

2.—EXPORTS OF FLOUR, PORK, BACON, LARD, BEEF, WHISKY, AND CORN, FOR THREE YEARS, FROM 1ST SEPTEMBER TO 31ST AUGUST.

PORTS	1849-50.						
	Flour, barrels	Pork, barrels	Bacon, hds	Lard, kegs	Beef, barrels	Whisky, bbls	Corn, sacks
New-York	8,625	202,708	28,081	372,451	8,404	1,104	9,377
Boston	65,694	157,380	8,142	306,689	17,003	698	41,558
Philadelphia	500	17,186	5,256	80,087	—	171	—
Baltimore	203	34,036	4,895	72,290	3,391	1,279	—
Charleston	2,034	4,059	4,246	2,098	229	8,057	1,501
Other coastwise ports ..	107,264	20,395	10,423	24,975	5,151	33,289	65,023
Cuba	366	1,260	1,359	109,524	10	—	—
Other foreign ports ...	27,065	33,213	2,577	586,735	21,654	306	338,643
Total	211,760	470,237	64,929	1,554,849	55,843	44,904	456,057

In the above, the exports to Mobile, &c., via the Pontchartrain Railroad and New Canal, are included.

3.—EXPORTS OF COTTON AND TOBACCO FROM NEW-ORLEANS, FOR FIVE YEARS—COMMENCING 1ST SEPTEMBER AND ENDING 31ST AUGUST.

WHITHER EXPORTED	COTTON, BALFS.					TOBACCO, HEDS.				
	1850-51	1849-50	1848-49	1847-48	1846-47	1850-51	1849-50	1848-49	1847-48	1846-47
Liverpool	562,277	378,145	603,455	619,618	367,810	6,457	6,062	6,130	8,706	3,374
London	—	1,367	305	—	43	6,192	6,793	5,362	10,008	5,173
Glasgow and Greenock ..	15,418	10,817	27,533	27,996	10,598	—	—	—	—	—
Cowes, Falmouth, &c. ...	4,678	3,741	11,237	6,270	6,102	574	3,435	2,535	1,153	1,143
Cork, Belfast, &c.	—	3, 69	2,488	—	810	—	—	—	—	—
Havre	125,667	112,159	139,910	123,856	90,103	659	718	6,998	2,301	1,159
Bordeaux	1,164	1,066	3,424	3,178	330	517	579	1,450	198	242
Marseilles	4,131	3,6 8	11,313	8,659	3,323	3,006	759	2,192	2,625	2,096
Nantes, Orléans, and Rouen ..	—	630	—	5,375	1,963	—	—	—	—	—
Amsterdam	489	—	—	1,831	—	—	—	—	—	—
Rotterdam and Ghent ...	1,468	572	2,659	304	595	712	894	—	75	568
Bremen	12,905	1,801	12,137	8,716	4,369	7,071	7,719	4,841	5,232	4,446
Antwerp, &c.	10,366	11,994	24,338	14,170	2,912	570	2,244	1,077	3,371	1,652
Hamburg	3,235	112	5,321	7,091	7,466	75	573	80	339	403
Gottenburg	8,180	5,021	7,303	4,887	4,376	941	1,365	1,041	945	949
Spain and Gibraltar ..	41,018	46,296	42,823	32,565	17,705	7,454	4,726	5,630	7,692	11,795
Havana, Mexico, &c. ...	565	2,292	16,328	25,468	9,376	—	—	—	617	—
Genoa, Trieste, &c.	42,537	36,362	41,614	45,228	20,542	5,613	5,674	3,845	3,368	5,046
China	—	—	—	1,490	—	—	—	—	—	—
Other foreign ports	11,143	6,496	9,304	13,057	6,579	816	1,375	882	975	1,006
New-York	52,398	84,891	67,611	67,578	53,187	10,067	11,305	7,318	9,573	5,438
Boston	82,540	109,069	111,584	143,989	75,546	1,594	1,169	1,069	1,619	2,664
Providence, R. I.	—	—	360	1,566	470	—	—	—	—	—
Philadelphia	14,667	15,616	18,466	16,213	13,589	1,116	1,291	1,476	1,369	2,779
Baltimore	2,311	4,017	4,959	12,328	7,288	754	277	885	200	201
Portsmouth	—	—	—	5,733	3,491	—	—	—	—	—
Other coastwise ports ..	1	230	511	3,132	1,437	291	337	135	228	115
Western States	500	—	2,300	1,500	2,500	—	—	—	—	—
Total	907,458	836,561	1,167,303	1,201,897	794,508	54,801	57,955	52,896	60,364	50,377

WHITHER EXPORTED	COTTON, BALS.					TOBACCO, HDS.				
	1850-51	1849-50	1848-49	1847-48	1846-47	1850-51	1849-50	1848-49	1847-48	1846-47
Great Britain.....	582,373	307,180	645,018	654,083	365,368	13,223	16,820	14,017	10,867	9,005
France.....	130,362	117,413	154,647	140,068	95,719	4,193	2,056	10,640	4,964	3,497
North of Europe.....	47,786	25,196	61,092	50,056	26,297	9,393	12,725	7,030	10,475	8,018
So. of Europe and China.....	84,120	84,956	180,765	104,751	57,823	13,859	11,975	10,347	12,079	17,840
Otherwise.....	152,817	213,843	204,811	222,039	150,561	13,844	14,379	10,868	12,969	11,317
Total.....	907,458	838,591	1,167,303	1,201,897	724,508	54,501	57,955	52,896	60,364	50,376

4.—REPORTS OF SUGAR AND MOLASSES, FROM NEW-ORLEANS, FOR TWO YEARS, (up the river excepted,) FROM 1st OF SEPTEMBER TO 31st OF AUGUST.

WHITHER EXPORTED	1850-51.					1849-50.				
	Sugar, hds.	Sugar, barrels.	Molasses, hds.	Molasses, barrels.		Sugar, hds.	Sugar, barrels.	Molasses, hds.	Molasses, barrels.	
New-York.....	13,595	655	569	22,640		42,523	2,329	2,078	42,776	
Philadelphia.....	16,364	867	—	7,735		18,344	3,074	—	14,636	
Charleston, S. C.....	3,517	660	9	7,031		5,014	683	—	10,331	
Bavannah.....	1,703	89	—	2,981		1,981	300	82	4,370	
Prov. and Bristol, E. I.....	—	—	—	—		—	—	247	37	
Boston.....	723	27	—	2,172		2,929	961	—	2,798	
Baltimore.....	2,670	237	—	2,862		8,101	2,285	—	13,438	
Norfolk, Richmond, and Peters- burg, Va.....	4,073	120	—	2,313		4,600	892	30	6,124	
Alexandria, D. C.....	598	—	—	631		649	—	—	600	
Mobile.....	3,840	2,908	—	10,308		2,676	1,596	—	8,850	
Apalachicola and Pensacola.....	1,071	254	—	4,578		1,630	460	—	5,70	
Other ports.....	1,131	3,469	118	3,677		873	1,602	305	3,237	
Total.....	44,147	8,444	636	67,084		92,720	13,948	2,748	112,674	

5.—MONTHLY ARRIVALS OF SHIPS, BARKS, BRIGS, SCHOONERS, AND STEAMBOATS FOR THREE YEARS, FROM 1st OF SEPTEMBER TO 31st OF AUGUST.

MONTHS.	1850-51.							
	Ships.	Barks.	Brigs.	Scho.	St. Ships.	Total.	St. Barks.	St. Barks.
September.....	31	22	12	54	17	136	176	
October.....	49	17	18	28	15	131	153	
November.....	77	34	40	66	13	230	259	
December.....	61	30	43	64	12	210	406	
January.....	68	48	29	67	16	227	386	
February.....	42	24	28	71	12	198	311	
March.....	88	32	34	90	17	261	326	
April.....	64	21	27	79	17	198	272	
May.....	30	29	31	33	24	187	243	
June.....	43	21	16	50	18	148	159	
July.....	34	13	17	47	17	128	162	
August.....	18	10	10	31	12	81	125	
Total.....	615	320	316	704	190	2,144	2,918	

MONTHS.	1849-50.							
	Ships.	Barks.	Brigs.	Scho.	St. Ships.	Total.	St. Barks.	St. Barks.
September.....	27	9	11	32	7	86	164	
October.....	45	22	24	33	13	139	215	
November.....	26	47	44	37	14	228	228	
December.....	37	57	60	45	10	259	261	
January.....	71	63	47	59	11	244	285	
February.....	101	63	39	39	10	251	313	
March.....	70	61	53	34	15	233	321	
April.....	132	56	34	53	11	286	267	
May.....	74	33	19	43	16	185	191	
June.....	40	23	26	31	8	128	153	
July.....	12	19	10	21	12	74	136	
August.....	2	12	9	18	10	51	130	
Total.....	751	462	375	456	136	2,186	2,873	

MONTHS.	1848-49.							
	Ships.	Barks.	Brigs.	Scho.	St. Ships.	Total.	St. Barks.	St. Barks.
September.....	37	19	19	42	7	117	141	
October.....	78	30	31	80	7	226	177	
November.....	67	26	68	63	9	233	261	
December.....	72	45	62	43	8	230	337	
January.....	78	64	91	99	6	238	346	
February.....	42	34	63	85	6	229	298	
March.....	83	53	72	105	1	314	317	
April.....	86	41	45	86	6	264	293	
May.....	77	61	87	166	11	392	294	
June.....	61	38	54	101	19	263	261	
July.....	53	80	52	67	16	218	174	
August.....	45	18	24	32	14	123	128	
Total.....	769	451	663	980	100	2,961	2,962	

NEW-YORK AND NEW-ORLEANS.—RECEIPTS OF BREADSTUFFS.—The following is a most interesting table, in showing how New-York is increasing her annual receipts of western produce, and how she already compares with New-Orleans:

Receipts at New-Orleans by river, in 1848, 1849, and 1850, to September 31—3 years.		Receipts at the Hudson River by canal, in 1848, 1849, and 1850, to close of navigation—3 years.	
Flour.....	2,812,191	bbls.....	8,636,207
Pork.....	1,536,817	bbls.....	511,715
Beef.....	900,901	bbls.....	264,072
Wheat.....	852,497	bush.....	8,795,750
Corn.....	2,768,760	bush.....	11,176,226
Other grains.....	5,350,151	bush.....	11,210,389
Bacon.....	135,622,515	lbs.....	26,364,158
Butter.....	6,275,970	lbs.....	61,695,964
Cheese.....	8,956,859	lbs.....	97,590,632
Lard.....	262,110,000	lbs.....	27,137,175

NEW-ORLEANS.—RECEIPTS, 1860-61,
FROM THE INTERIOR.

Articles	1860-61	
Apples, barrels.....	54,808	
Bacon, assorted casks, &c.....	48,602	
Bacon, bbls. and boxes.....	9,274	
Bacon, hams, bbls.....	44,478	
Bacon, in bulk, lbs.....	285,000	
Bagging, pieces.....	72,804	
Bale rope, coils.....	107,324	
Beans, barrels.....	4,286	
Butter, kegs.....	54,967	
Butter, barrels.....	2,720	
Beeswax, bbls.....	230	
Beef, bbls and tierces.....	48,066	
Beef, dried, lbs.....	15,800	
Buffalo robes, packs.....	155	
COTTON.	La. and Mi. bales.....	618,156
	Lake.....	14,899
	N. Ala. and Tenn.....	236,821
	Arkansas.....	62,793
	Montgomery, &c.....	18,051
	Mobile.....	24,478
	Florida.....	11,091
	Texas.....	9,252
	Corn meal, barrels.....	3,662
	Corn, in ears.....	42,526
Corn, shelled, sacks.....	1,298,932	
Cheese, boxes.....	78,894	
Candles, boxes.....	80,748	
Cider, barrels.....	245	
Coal, western.....	700,000	
Dried peaches.....	2,685	
Dried apples.....	4,168	
Flax seed, tierces.....	204	
Flour, barrels.....	941,106	
Furs, hhds, bxs, and bbls.....	1,289	
Feathers, bags.....	3,645	
Hemp, bales.....	25,116	
Hides.....	140,338	
Hay, bales.....	48,281	
Iron, pig, tons.....	152	
Lard, hhds.....	—	
Lard, tea and bbls.....	115,570	
Lard, kegs.....	151,981	
Lime, western, barrels.....	37,738	
Lead, pigs.....	325,505	
Lead, bar, kegs.....	629	
Lead, white.....	1,930	
Molasses, barrels.....	184,483	
Oats, bbls. and sacks.....	479,741	
Onions, bbls.....	14,297	
Oil, linseed.....	478	
Oil, castor, bbls.....	4,145	
Oil, lard.....	17,157	
Pickles, kegs, and bbls.....	893	
Potatoes, bbls.....	192,922	
Pork, tea and bbls.....	286,084	
Pork, boxes.....	1,980	
Pork, hhds.....	1,231	
Pork, in bulk, lbs.....	10,513,895	
Porter and ala, barrels.....	324	
Packing yarn, reels.....	4,190	
Skins, deer, packs.....	1,119	
Shot, kegs.....		2,044
Sugar, hogheads.....		125,755
Sugar, barrels.....		18,675
Soap, boxes.....		9,484
Shingles.....		50,000
Staves.....		9,000,000
Tallow, barrels.....		6,164
Tobacco, leaf, hogheads.....		64,080
Tobacco, chewing, kegs.....		4,115
Tobacco, bales.....		220
Twine, bundles.....		3,186
Whiskey, barrels.....		157,741
Window glass, boxes.....		16,428
Wheat, bbls. and sacks.....		88,797

RECEIPTS BY THE NEW CANAL, NEW-ORLEANS.

Statement of Produce received in the New
Basin, for the year ending Aug. 31, 1861.

Cotton bales.....	40,829
Lumber, yellow pine and cypress, feet.....	33,107,000
Wood—oak, ash, and pine, cords.....	27,328
Bricks.....	24,000,000
Sand, barrels.....	197,600
Shells, barrels.....	52,200
Charcoal, barrels.....	110,600
Tar, barrels.....	2,239
Shingles.....	2,392,000
Laths.....	3,160,000
Staves.....	632,000
Sash and doors, pairs.....	7,800
Spirits turpentine, barrels.....	3,094
Rosin, barrels.....	10,250
Salt, sacks.....	15,799
Cotton gins.....	549
Hides.....	3,955
Corn mills.....	70
Domestica, bales.....	959
Sheep skins, bales.....	8
Hay, bales.....	35
Buckets, dozens.....	682
Tobacco, leaf, boxes.....	758
Merchandise, boxes.....	22
Moss, bales.....	205
Cotton seed, bags.....	95
Wool, bags.....	30
Sugar, hogheads.....	970
Molasses, barrels.....	772
Fish, barrels.....	51
Camphene, barrels.....	6
Knees.....	1,480
Pickets.....	24,900
Clap-boards.....	48,900
Gunny bags, bales.....	125
Hoop poles.....	40,000
Horned cattle.....	200
Pork, barrels.....	25
Beeswax, boxes.....	1
Paper, bundles.....	61
Castor oil, cans.....	81
Lime, barrels.....	1,002
Hemp, bales.....	20
Lime, casks.....	129
Cement, barrels.....	150
Plaster, hogheads.....	12

VALUE OF PRODUCE OF THE INTERIOR.

A Table showing the receipts of the principal articles from the interior, during the year ending 31st August, 1851,* with their estimated average and total value.

ARTICLES.	Amount.	Average.	Value.
Apples.....bbls.	54,808	83 00	\$174,494
Bacon, res'd, hds & cks.	68,002	60 00	2,016,120
Bacon, assorted.....boxes.	9,774	30 00	278,220
Bacon Hams.....hds & cks.	44,478	60 00	2,668,680
Bacon in bulk.....pds.	235,000	7	16,450
Bagging.....pieces.	72,304	12 50	903,800
Bale Rope.....coils.	107,294	7 50	804,180
Beans.....bbls.	4,236	5 00	21,180
Butter, kegs and drkms.	54,967	5 00	274,835
Butter.....bbls.	2,720	25 00	68,000
Butter.....bbls.	2,720	45 00	10,340
Beeswax....."	30,164	10 00	36,640
Beef....."	11,402	15 00	171,800
Beef, dried.....pounds.	15,300	7	1,071
Buffalo Robes.....pks.	155	70 00	10,850
Cotton.....bales.	985,036	40 00	48,756,764
Corn Meal.....bbls.	3,662	8 00	10,986
Corn in ear....."	42,526	90	38,273
Corn, shelled.....sacks.	1,298,938	1 30	1,688,608
Cheese.....boxes.	78,994	8 50	276,129
Candles....."	80,748	6 00	484,488
Cider.....bbls.	945	3 00	735
Coal, western....."	700,800	50	350,000
D'd App's & Peach's....."	6,853	3 00	20,569
Feathers.....bags.	8,645	35 00	127,575
Flaxseed.....tierces.	204	12 00	2,448
Flour.....bbls.	941,106	4 50	4,234,977
Furs.....hds, bds, & bxs.	1,989		60,000
Hemp.....bales.	25,116	18 00	452,088
Hides....."	140,338	1 00	140,338
Hay.....bales.	46,281	3 00	144,843
Iron, pig.....tons.	152	25 00	3,800
Lard.....bbls & pks.	115,570	24 00	2,773,680
Lard.....kegs.	151,931	4 00	607,724
Leather.....bundles.	8,490	25 00	212,250
Lime, western.....bbls.	37,738	1 50	56,607
Lead.....pigs.	325,505	3 20	1,041,616
Lead, bar.....kegs & bxs.	629	20 00	12,580
Lead, white.....kegs.	1,930	7 00	13,610
Molasses, (est'd cp).....gals.	10,500,000	25	2,625,000
Oats.....bbls & pks.	479,741	1 00	479,741
Onions.....bbls.	14,279	2 00	28,558
Oil, linseed....."	178	85 00	6,280
Oil, castor....."	4,145	50 00	207,250
Oil, lard....."	17,157	26 00	446,082
Potatoes....."	162,922	2 00	325,844
Pork.....tcs & bbls.	966,084	12 00	3,438,100
Pork.....boxes.	1,980	25 00	49,500
Pork.....hds.	1,231	60 00	73,860
Pork, in bulk.....pds.	10,513,895	5	578,964
Porter and Ale.....bbls.	384	10 00	3,840
Packing Yarn.....reels.	4,190	7 00	29,330
Skins, deer.....packs.	1,119	25 00	57,975
Skins, bear....."	7	15 00	105
Shot.....kegs.	2,044	25 00	51,100
Soap.....boxes.	9,484	3 00	28,452
Staves.....M.	9,000	35 00	315,000
Sugar, (est'd cp).....hds.	211,303	60 00	12,678,180
Spanish Moss.....bales.	5,974	6 00	35,844
Tallow.....bbls.	6,164	24 00	147,936
Tobacco, leaf.....hds.	52,830	120 00	6,327,000
Tobacco, strips....."	9,100	150 00	1,365,000
Tobacco, stems....."	2,200	20 00	44,000
Tobacco, chewing.....kegs and boxes.	4,115	30 00	123,450
Twine.....bundles & boxes.	3,156	10 0	31,560
Vinegar.....bbls.	89	6 00	534
Whiskey....."	157,741	8 00	1,261,928
Window Glass.....boxes.	16,428	5 00	82,140
Wheat.....bbls & pks.	88,797	2 00	177,594
Other various articles, estimated at.....			5,000,000

Total value.....dollars 106,924,083
Total in 1849-50..... 96,697,673
Total in 1848-49..... 81,989,692
Total in 1847-48..... 79,779,151

* For 1851-52, see Appendix.

STATEMENT OF THE RECEIPTS AND EXPORTS OF COTTON AND TOBACCO AT THE PORT OF NEW-ORLEANS IN EACH YEAR, FROM 1822-23 TO 1848-49, A PERIOD OF TWENTY-SEVEN YEARS.*

	COTTON.	
	Receipts	Exports
1822-23.....	\$161,959	\$171,872
1823-24.....	141,524	143,848
1824-25.....	206,358	208,914
1825-26.....	248,981	259,681
1826-27.....	336,573	326,516
1827-28.....	295,858	304,073
1828-29.....	268,639	367,736
1829-30.....	362,977	351,237
1830-31.....	429,392	423,942
1831-32.....	845,646	358,104
1832-33.....	403,833	410,524
1833-34.....	467,984	461,026
1834-35.....	536,172	536,991
1835-36.....	495,442	490,495
1836-37.....	605,813	588,969
1837-38.....	742,726	788,313
1838-39.....	578,514	579,179
1839-40.....	954,445	949,320
1840-41.....	822,870	821,288
1841-42.....	740,155	749,267
1842-43.....	1,089,642	1,088,870
1843-44.....	910,854	895,375
1844-45.....	979,238	984,616
1845-46.....	1,053,633	1,054,857
1846-47.....	740,669	724,508
1847-48.....	1,218,805	1,201,807
1848-49.....	1,142,383	1,167,302
1849-50.....	837,723	838,591
Total.....	\$17,114,696	\$16,883,307

	TOBACCO.	
	Exports	Receipts
1822-23.....	\$16,292	\$28,624
1823-24.....	26,262	26,910
1824-25.....	17,759	16,849
1825-26.....	18,242	18,231
1826-27.....	29,684	26,540
1827-28.....	29,448	35,098
1828-29.....	24,637	26,288
1829-30.....	32,438	23,028
1830-31.....	32,098	36,872
1831-32.....	31,174	35,056
1832-33.....	20,627	26,637
1833-34.....	25,871	26,210
1834-35.....	34,059	38,831
1835-36.....	60,558	41,604
1836-37.....	28,501	35,821
1837-38.....	37,588	35,555
1838-39.....	28,153	30,852
1839-40.....	48,827	40,436
1840-41.....	53,170	54,667
1841-42.....	67,555	68,058
1842-43.....	92,509	89,891
1843-44.....	82,435	81,249
1844-45.....	71,493	68,679
1845-46.....	72,896	62,045
1846-47.....	55,588	50,876
1847-48.....	55,882	60,364
1848-49.....	52,335	52,896
1849-50.....	60,304	57,955
Total.....	\$1,191,374	\$1,196,623

* For 1851-52, see Appendix.

Upon the supposition that the average value of cotton and tobacco for the twenty-seven years above stated may be fairly estimated at \$40 per bale for the former, and

\$70 per hoghead for the latter, it would give a total value for these two articles alone of \$778,806,870.

NEW-ORLEANS.—Table exhibiting the Mortality of the City of New-Orleans since 1789, (with exceptions as stated,) with the ratios, the relative proportion dying at the Charity Hospital, and the dates of great physical changes in and about the city.—By Dr. E. H. BARROW.

Years Embraced.	Average Population.	Average Mortality.	Ratio 1 to —	Ratio per cent.	Average Charity Hospital Mortality to City Mortality per cent.	Dates of Physical Alterations and Improvements in the City and Neighborhood.
10 years, 1787-97.	7,090	488	14.88	6.95	—	1789-91-99—Crevasses above, affecting the city. 1794—Fortifications made around the city, and surrounded by trenches. 1794-97—Canal Carondelet dug.
6 years, 1811-16.	28,741	969	30.83	3.42	—	1811—Canal Carondelet cleaned out. 1816—Crevasses.
1816-20.	37,965	1,517	25.15	3.96	17.77	1817—First pavements commenced. 1820—Wooden sidewalks and curbing removed, and replaced with stone. 1817-20—Large inclosures of the batture.†
• 4 years, omitting 1881. 1881-85.	44,530	2,068	21.17	4.72	17.60	1824—Gormley's Canal and Basin dug about 1824-28.
1826-30.	47,534	1,707	27.68	3.61	21.83	1824-28—Extensive paving done. 1828-28—McIntosh Canal adapted from a natural drain, cleaned out, and deepened.
• 4 years, omitting 1882. 1831-35.	5 70	3,503	18.22	5.92	27.11	1831—Violent storm inundated back part of the city, to Dauphin street. 1833-35—The Bank Canal of the Second Municipality dug to the lake—7 miles. 1832-34—Extensive paving. 1833-35—Forest growth cut down in rear of city, First Municipality.
• 4 years, omitting 1887. 1836-40.	74,902	2,948	25.30	3.90	27.11	1836—Draining machine on Bayou St. John, drained the section in the rear of First Municipality. 1837, October—Violent storm inundated the rear of the city. Draining company continued their operations.
1841-45.	90,000	3,923	23.29	4.46	21.20	1844—Violent storm inundated the city up to Burgundy street. 1845-50—That section of the rear of the city, between the canals Carondelet and Bank, in the rear of the central parts of the city, ditched, drained, and forest growth removed.
1846-50. N. O. and Lake-ville, for the last year.	100,603	7,662	15.33	6.62	24.71	1849, May and June—Extensive inundation from Haute Crevasse, extending as high up as Carondelet street.
TOTAL.			23.10	4.87	22.36	

* The total mortality of these years could not be procured.

† Extract from the Report of the Physico-Medical Society on the epidemic yellow fever of 1820, by Drs. Resdolph, Davidson, and Marshall: "We would remind the Society of the evident co-existence existing between the inclosure of the batture and the recent unusual consecration of epidemic fevers in this city." P. 8.—I intended to have added a column embracing the average annual immigration from abroad, but the record has not been retained at our Custom-house anterior to 1845, since when it has averaged about 30,000 per annum; but very few arriving in the summer and fall months.

NEW-ORLEANS.—HEALTH.—There are causes influencing our meteorological condition, which, in a proper estimate of our climate, we cannot overlook. I allude to the great modifying power of *large inland bodies of water* upon it. I am indebted to my friend, Professor Forshey, for the interesting computation. The whole area of the state of Louisiana is 48,972 sq. m.

Onachita alluvion, above Bœuf

River..... 900 sq. m.

Making an aggregate, including

flat lakes, &c..... 21,370 "

All this is not constantly under water, but it is so more or less, and *constantly* subject to it. This does not include the alluvions of the smaller streams, and some, he admits, may have been reclaimed by levees. He further states, that of the whole alluvion, there is uncultivable more than half, say 12,000 square miles, including shallow lakes.

You see, then, that about *one eighth* of the state is constantly under water, and that more than *two fifths* of it are subject to inundation.

Of this—
Marsh alluvion, west of delta,
(or Vermilion River)..... 2,880 "
Mississippi delta, south of Red
River (Lyell's limit of delta)..... 12,514 "
Mississippi delta, north of Red
River (within Forshey's delta)..... 3,420 "
Red river alluvion above Avoy-
elles..... 1,656 "

NEW-ORLEANS.—COMMERCE, 1850-51.

MONTHLY ARRIVALS OF FLAT-BOATS.

MONTHS.	Ohio	Indiana	Virginia	Pennsylvania	Illinois	Missouri	Iowa	Arkansas	Alabama	Tennessee	Mississippi	TOTAL.
September.....	19	3	3	11	..	..	..	..	..	9	..	43
October.....	2	3	8	9	..	..	..	..	..	2	..	23
November.....	3	4	7	18	2	..	..	..	..	4	..	80
December.....	27	8	22	28	..	..	..	..	..	3	..	118
January.....	79	8	26	12	..	..	..	..	..	..	..	70
February.....	19	4	9	37	..	..	..	..	..	10	..	170
March.....	35	6	111	15	9	..	..	..	..	..	2	132
April.....	10	7	44	29	5	..	..	..	..	27	7	108
May.....	11	11	40	32	3	..	..	..	..	10	1	68
June.....	21	3	16	17	..	..	..	..	..	7	..	46
July.....	2	6	2	16	..	..	..	..	..	14	..	47
August.....	4	3	8	13	..	..	..	..	..	17	..	218
Total.....	218	58	298	222	19	..	..	..	..	104	10	941

COMPARATIVE PRICES OF FLOUR AT NEW-ORLEANS ON THE FIRST OF EACH MONTH, FOR FIVE YEARS.

	1850-51.	1850-50.	1849-50.	1847-48.	1846-47.	
September.....	\$4 62½	a 5 12½	4 50 a 5 75	4 00 a 4 75	4 75 a 6 00	3 50 a 4 00
October.....	4 00	a 5 12½	5 00 a 5 62½	5 00 a 5 25	4 00 a 5 00	4 00 a 4 62
November.....	4 25	a 5 25	4 75 a 5 50	4 75 a 5 12½	5 25 a 5 62½	5 00 a 5 50
December.....	4 50	a 5 12½	6 00 a 5 50	4 62½ a 5 00	5 12½ a 6 00	4 87½ a 5 37
January.....	4 25	a 5 00	5 00 a 6 62½	4 25 a 4 75	5 50 a 6 00	4 87½ a 5 25½
February.....	4 25	a 5 00	5 12½ a 5 75	4 12½ a 5 00	4 75 a 5 25	6 00 a 6 50
March.....	4 00	a 4 75	5 25 a 6 00	4 50 a 5 25	5 00 a 5 75	5 50 a 6 25
April.....	4 00	a 4 87½	5 62½ a 6 75	4 12½ a 5 00	5 25 a 5 87½	6 00 a 6 25
May.....	4 12½	a 5 00	5 37½ a 6 75	3 87½ a 5 00	4 25 a 5 25	5 75 a 6 00
June.....	3 75	a 4 75	6 75 a 7 37½	4 50 a 5 25	4 25 a 4 75	6 75 a 7 50
July.....	3 25	a 4 75	5 50 a 7 25	3 87½ a 5 00	4 25 a 5 00	6 00 a 7 00
August.....	4 00	a 5 25	4 00 a 6 75	6 00 a 7 50	4 00 a 4 62½	4 00 a 5 50

COMPARATIVE PRICES OF MEAT AND PRIME PORK.

	Meat, 1850-51.	Prime, 1850-51.	Meat, 1849-50.	Prime, 1849-50.
September.....	\$10 25 a 10 50	8 50 a 9 00	9 25 a 9 50	8 25 a 8 37½
October.....	10 25 a 10 37½	8 75 a 9 00	9 75 a 10 00	8 37½ a 8 60
November.....	11 25 a 12 00	8 25 a 8 75	9 57½ a 9 50	8 25 a 8 50
December.....	11 37½ a 11 75	8 12½ a 8 50	9 37½ a 9 50	8 50 a 8 75
January.....	11 75 a 12 00	9 00 a —	10 50 a 11 00	8 00 a —
February.....	12 50 a 13 00	10 50 a 11 00	9 25 a 9 50	7 37½ a 7 62½
March.....	12 50 a 13 00	11 00 a 11 50	9 50 a 10 00	7 37½ a 7 50
April.....	13 00 a 13 50	10 75 a 11 25	9 37½ a 9 62½	7 37 a 7 50
May.....	14 00 a 14 75	11 75 a 12 25	9 50 a 9 75	7 75 a 8 00
June.....	44 50 a 14 75	12 00 a 12 50	9 75 a 10 00	8 25 a 8 50
July.....	14 00 a 14 37½	12 00 a 12 50	— a 12 00	9 50 a —
August.....	15 00 a 15 25	12 50 a 13 00	11 50 a 11 75	— a 9 75

COMPARATIVE PRICES OF CORN, IN SACKS.

	1850-51.	1851-52.	1852-53.	1853-54.	1854-55.	1855-56.	1856-57.
September.....	53	63	35	46	52	57	50
October.....	50	60	42	48	49	53	50
November.....	70	75	50	55	52	58	41
December.....	70	—	46	52	42	51	45
January.....	60	65	—	47	35	40	54
February.....	60	68	45	60	34	43	40
March.....	59	58	50	57	30	41	36
April.....	50	58	50	56	29	40	30
May.....	46	54	76	83	30	45	22
June.....	38	51	64	70	50	55	32
July.....	34	57	75	85	50	53	32
August.....	34	60	75	85	50	56	36

FOREIGN EXPORTS AT NEW-ORLEANS.

AMERICAN PRODUCE.

American Vessels to Foreign Countries.

Third quarter, 1850.....	\$6,078,397
Fourth quarter, 1850.....	7,983,399
First quarter, 1851.....	11,431,425
Second quarter, 1851.....	12,523,388
Total.....	\$38,022,609

Foreign Vessels to Foreign Countries.

Third quarter, 1850.....	\$2,103,110
Fourth quarter, 1850.....	2,719,728
First quarter, 1851.....	7,692,659
Second quarter, 1851.....	3,449,907
Total.....	\$15,965,404

Coastwise.

Third quarter, 1850.....	\$2,859,567
Fourth quarter, 1850.....	6,177,128
First quarter, 1851.....	11,707,593
Second quarter, 1851.....	6,484,624
Total.....	\$27,228,912
Total Foreign.....	58,986,018
“ Coastwise.....	27,228,912
Grand total.....	\$81,216,925

FOREIGN PRODUCE.

American Vessels to Foreign Countries.

Third quarter, 1850.....	\$55,192
Fourth quarter, 1850.....	158,316
First quarter, 1851.....	91,313
Second quarter, 1851.....	83,445
Total.....	\$388,265

Foreign Vessels to Foreign Countries.

Third quarter, 1850.....	\$14,616
Fourth quarter, 1850.....	18,255
First quarter, 1851.....	13,140
Second quarter, 1851.....	11,674
Total.....	57,685
Grand total.....	\$445,950

UNITED STATES BRANCH MINT.

Statement of the Deposits and Coinage of the Branch Mint, New-Orleans, from the 1st of August, 1850, to the 31st of July, 1851, inclusive:

GOLD DEPOSITS.

California gold	
bullion.....	\$8,152,878 83
Other gold bul..	132,758 32
Total gold dep't.....	\$8,285,637 14

SILVER DEPOSITS.

Silver extracted	
from California Gold.....	\$57,571 61
Other silver bul.	764,513 64
Total silver dep't.....	\$822,085 25
Total value of gold and silver deposits.....	\$9,107,722 39

GOLD COINAGE, 1850-51.

	Pieces.	Value.
Double Eagles, 333,500.....		\$6,670,000
Eagles.....	149,500	1,495,000
Half Eagles....	33,000	165,000
Quarter Eagles.	204,000	510,000
Gold Dollars..	154,000	154,000
Total.....		\$8,994,000

SILVER COINAGE.

	Pieces.	Value.
Dollars.....	3,000	\$3,000
Half Dollars....	1,712,000	856,000
Quarter Dollars.	276,000	69,000
Dimes.....	530,000	53,000
Half Dimes....	1,030,000	51,500
Three Cent Pos.	600,000	18,000
Total.....	4,151,000	\$1,050,500
Total coinage...	5,025,000	\$10,044,500

IMPORTS OF SPECIE AT NEW-ORLEANS FOR FOUR YEARS FROM 1ST SEPTEMBER TO 31ST AUGUST.

1850-51.....	\$7,937,119
1849-50.....	3,792,662
1848-49.....	2,501,350
1847-48.....	1,845,808
1846-47.....	6,880,050

DIRECT IMPORTS OF COFFEE, SUGAR, AND SALT
AT NEW-ORLEANS.

	1850-51.	1849-50.	1848-49.
Coffee, Havana, bags.....	10,367	90,637	16,341
Coffee, Rio, bags.....	274,690	225,013	299,139
Sugar, Havana, boxes.....	29,393	18,843	14,775
Salt, Liverpool, sacks.....	499,938	499,982	508,517
Salt, Turk's Isld, &c., bush.	419,965	563,183	946,001

FOREIGN COMMERCE OF NEW-ORLEANS.

TONNAGE CLEARED.

July to September, 1850.

	No. of vessels.	Tonnage.
American for foreign ports..	109	44,549 63
Foreign.....	52	19,866 96
Coastwise.....	199	57,442 80

306 121,858 94

October to December, 1850.

American for foreign ports..	114	53,946 18
Foreign.....	66	20,937 40
Coastwise.....	275	76,789 20

455 151,672 78

January to March, 1851.

American for foreign ports..	188	85,747 51
Foreign.....	119	53,761 56
Coastwise.....	424	121,862 03

731 260,871 15

April to June, 1851.

American for foreign ports..	234	108,715 82
Foreign.....	88	34,883 15
Coastwise.....	329	97,579 68

651 240,878 72

RECAPITULATION.

Total third quarter, 1850.....	360	121,858 94
" fourth " ".....	455	151,672 78
" first " 1851.....	731	260,871 15
" second " ".....	651	240,878 72

2,197 775,081 69

Total to June, 1851.....775,081 69

The year previous.....773,783 19

Difference.....1,298 50

Comparative Arrivals, Exports, and Stocks of Cotton and Tobacco at New-Orleans, for ten years, from 1st September each year to date.

COTTON—BALES.

Years.	Arrivals.	Exports.	Stocks.
1840-51.....	965,686	987,456	15,306
1840-50.....	937,738	928,591	14,615
1840-49.....	1,143,368	1,167,303	15,480
1847-48.....	1,213,985	1,261,997	37,401
1846-47.....	746,669	724,698	23,493
1845-46.....	1,053,696	1,054,657	3,363
1844-45.....	979,228	964,616	7,556
1843-44.....	910,854	895,875	12,631
1842-43.....	1,069,648	1,096,876	4,769
1841-42.....	749,165	749,367	4,428

TONNAGE ENTERED.

July to September, 1850.

	No. of vessels.	Tonnage.
American from foreign ports.	61	16,176 94
Foreign.....	42	14,347 29
Coastwise.....	205	63,068 40

308 93,607 62

October to December, 1850.

American from foreign ports..	158	61,487 57
Foreign.....	106	40,827 33
Coastwise.....	303	124,885 02

567 226,999 93

January to March, 1851.

American from foreign ports..	178	64,104 41
Foreign.....	97	46,907 51
Coastwise.....	365	125,082 83

640 234,344 79

April to June, 1851.

American from foreign ports..	146	53,338 23
Foreign.....	88	34,617 58
Coastwise.....	306	123,189 65

539 213,175 50

RECAPITULATION.

Total third quarter, 1850.....	308	93,607 63
" fourth " ".....	567	226,999 92
" first " 1851.....	640	234,344 79
" second " ".....	539	213,175 50

2,054 768,028 04

Total to June, 1851.....768,028 04

The year previous.....763,634 53

Difference.....4,393 41

The arrivals at New-Orleans, for the last five years, have stood:

	Ships.	Barks.	Brigs.	Schoe.	Steam.	Ships Total.	Stonsa.
1846-7.....	764	451	663	849	109	2,961	3,022
1847-8.....	955	549	462	795	206	2,927	2,977
1848-9.....	757	462	375	456	136	2,186	2,873
1849-50.....	654	363	362	686	147	2,192	2,784
1850-51.....	615	320	315	764	190	2,144	2,948

A gradual decline will be observed in almost every description of vessels. The flat-boat arrivals during 1850-51 were 1,261; also a decline, as will be seen by our previous volumes.

TOBACCO—HHDS.

Years.	Arrivals.	Exports.	Stocks.
1840-51.....	64,030	54,501	23,871
1840-50.....	60,364	57,955	14,943
1840-49.....	52,335	52,966	13,283
1847-48.....	56,562	67,366	14,581
1846-47.....	55,366	56,366	22,366
1845-46.....	73,896	62,045	17,924
1844-45.....	71,463	65,679	7,673
1843-44.....	62,433	61,249	4,869
1842-43.....	92,449	60,981	4,873
1841-42.....	67,353	66,056	2,956

Comparative prices of Middling to Fair Cotton at New-Orleans, on the first of each month, during a period of Five Years, together with the Total Receipts at New-Orleans, and the Total Crops of the United States.

	1860-61, Cents.	1860-61, Cents.	1860-61, Cents.	1867-68, Cents.	1866-67, Cents.
September.....	9 a 11	9 a 11	5 a —	10 a 12	7 a 9
October.....	12 a 13	9 a 12	5 a 7	10 a 11	8 a 10
November.....	13 a 14	9 a 11	5 a 6	7 a 8	9 a 10
December.....	13 a 14	10 a 11	5 a 6	6 a 7	9 a 10
January.....	12 a 14	10 a 11	5 a 6	6 a 7	10 a 11
February.....	12 a 13	11 a 12	6 a 7	6 a 8	11 a 13
March.....	10 a 13	10 a 12	6 a 7	6 a 7	9 a 11
April.....	10 a 12	10 a 12	6 a 7	6 a 7	10 a 11
May.....	9 a 11	11 a 13	6 a 7	5 a 6	10 a 11
June.....	8 a 11	11 a 13	7 a 8	5 a 7	9 a 11
July.....	8 a 10	11 a 13	7 a 8	5 a 7	9 a 10
August.....	7 a 9	12 a 13	9 a —	6 a 7	10 a 12

	Sales.	Sales.	Sales.	Sales.	Sales.
Receipts at New-Orleans.	1,062,638	797,367	1,100,636	1,198,783	707,326
Crop of United States	2,350,437	2,096,706	2,700,000	2,350,000	1,800,000

Comparative Prices of Sugar on the Levee, on the first of each month, for Five Years.

	1860-61, Cents.	1860-61, Cents.	1860-61, Cents.	1867-68, Cents.	1866-67, Cents.
September.....	4 a 6	3 a 5	2 a 4	5 a 7	4 a 7
October.....	4 a 6	4 a 6	2 a 4	5 a 7	6 a 9
November.....	5 a 6	3 a 6	2 a 4	3 a 5	5 a 7
December.....	3 a 5	3 a 6	2 a 4	2 a 5	4 a 7
January.....	3 a 6	2 a 5	2 a 4	2 a 5	5 a 7
February.....	3 a 6	2 a 5	2 a 4	2 a 5	5 a 7
March.....	3 a 6	2 a 5	2 a 4	2 a 5	5 a 7
April.....	3 a 6	2 a 5	2 a 4	2 a 5	5 a 7
May.....	3 a 6	2 a 5	2 a 4	2 a 5	5 a 7
June.....	3 a 6	2 a 5	2 a 4	2 a 5	5 a 7
July.....	3 a 6	4 a 6	2 a 4	2 a 4	5 a 7
August.....	4 a 6	4 a 6	3 a 5	2 a 4	5 a 8

Comparative Prices of Molasses on the Levee, on the first of each month, for Five Years.

	1860-61, Cents.	1860-61, Cents.	1860-61, Cents.	1867-68, Cents.	1866-67, Cents.
September.....	20 a 32	10 a 20	15 a 20	28 a 32	15 a 22
October.....	20 a 32	10 a 20	17 a 21	28 a 32	20 a 25
November.....	23 a 25	24 a 24	23 a 24	22 a 23	26 a 30
December.....	23 a 24	20 a 20	19 a 20	19 a 19	23 a 24
January.....	18 a 24	17 a 19	18 a 19	17 a 17	24 a 25
February.....	23 a 27	15 a 20	20 a 21	17 a 19	27 a —
March.....	22 a 30	13 a 21	15 a 19	15 a 21	22 a 23
April.....	25 a 33	10 a 21	15 a 19	15 a 21	25 a 28
May.....	25 a 32	10 a 23	12 a 18	12 a 16	26 a 30
June.....	25 a 30	21 a 27	12 a 18	15 a 20	26 a 30
July.....	22 a 30	25 a 33	8 a 18	15 a 20	26 a 30
August.....	20 a 28	20 a 33	10 a 20	15 a 20	26 a 31

NEW-ORLEANS.—IMPORTANCE OF INCREASING HER FOREIGN COMMERCE—HER BANKING CAPITAL.—Mr. President, I now pass to another subject of great interest to New-Orleans, and one intimately connected with the progress and completion of railroads in the valley of the Mississippi. One of the chief drawbacks to New-Orleans is the absence of an import trade; and why are we without imports? Why is it, that a city exporting eighty or ninety millions of dollars annually, is so insignificant in that important branch of commerce? Because of the remoteness and uncertainty of our market—our being without a speedy, rapid, and cheap communication with the interior country that seeks New-Orleans as a market for its agricultural productions. It is

in our power to make New-Orleans a large importing city, by carrying out the objects of this Convention, and facilitating access between New-Orleans and every portion of the valley of the Mississippi, which is tributary to our trade; and without railroads this communication cannot be established to compete successfully with the active enterprise of our northern rivals. Under present and past circumstances, this city could not pretend to carry on importing extensively, when imports from those countries we trade with, were such here, were either cut off by distance from the country that would become customers for these imports by delays or uncertain navigation; or, when these facilities were at command, the goods imported had either become unsaleable or un-

fashionable, leaving the importer the alternative of waiting for the return of another season, at the expense of interest and multiplied expenses, which, under any circumstances, takes away all chance of profit. But, build the proposed railroads, place it within our power to travel to Nashville in twenty hours, Memphis in twenty hours, and all the important points of the eastern valley of the Ohio and Mississippi in a like quick time, and our own western borders and Texas in a few hours, then New-Orleans will be a city of imports, the produce of this rich agricultural empire will flow into her lap, not as a mere place of transit, but to be exchanged for the productions of other countries; then will New-Orleans begin the fulfilment of her destiny, and become renowned and famous among the cities of the world.

I propose to illustrate the advantages of an importing trade over one of mere export. We all know that the agencies employed in receiving, selling, and shipping fifty thousand bales of cotton are very small, and yet fifty thousand bales of cotton, at present cost, would produce \$1,500,000. Suppose the proceeds of this cotton were brought back in the manufactures of Birmingham, Manchester, Lyons, or any European city, how many agencies would be required to distribute it through all the channels between the importer and the consumer? Judging from the subdivisions of such employments in northern cities, the number would be very great; but these people not only want storehouses and shops, but want houses to live in; and with the demand for stores, shops, and houses, would spring up a demand for builders, artisans, and laborers, and agents of every description; our vacant lots would soon be covered by improvements, our vacant houses tenanted by an active and industrious population, that would become permanent and progressive. These are the elements of a solid prosperity, and what New-Orleans most needs. A mere city of transit commerce can never be a great city. You may talk of receipts of cotton, sugar, and tobacco—they have done all for you they ever will do. You must now rely on something else; and this reliance is mainly dependent on increased local pursuits and increased interior communication, such as New-York and every northern city has established.

I fear I tax your patience, but our present circumstances demand from every citizen attention to facts; and your time cannot be better employed than in listening to those I am detailing. It is a constant subject of complaint that New-Orleans has an insufficient banking capital—that money commands a high price. The error on this subject is very prevalent at home and abroad. Boston, which is constantly rung in our ears as an example of wealth and enterprise, divided from her commerce and manufactures, has about eighteen

millions of banking capital, whilst New-Orleans has about seventeen millions of fixed capital, or about ten millions of active capital. The cities of New-York and Brooklyn have a banking capital of twenty-eight millions, Philadelphia under ten millions, and Baltimore under seven millions. New-York and Brooklyn have nearly six times the population of New-Orleans, and less than three times an excess in banking capital. Philadelphia has a population nearly four times greater than New-Orleans, and her banking capital is not so great. Baltimore, that has a population near fifty per cent. greater than New-Orleans, has three millions less banking capital than New-Orleans. Cincinnati has not more than one eighth, and St. Louis not more than one twentieth of the banking capital of New-Orleans; and yet these cities have advanced with astonishing progress, and have almost doubled their populations, whilst New-Orleans is comparatively stationary.

The deposits of the banking institutions of New-Orleans bear a proportion to those of other cities, equally favorable with that of their capitals; and I assume that fixed capitals and deposits in any city are an index of its aggregate capital and means. With these facts, I proceed to make another statement, warranted by my knowledge of the facts: that the average price of money in New-Orleans since 1842 has been 33 per cent. cheaper than the average price in Boston; 25 per cent. cheaper than the average price in New-York, Philadelphia, or Baltimore; and 50 per cent. cheaper than in Cincinnati and St. Louis. When I speak of the average price or the dearth or cheapness of money, I mean the current price demanded and paid on good and undoubted security; and I am particular on these points of comparison, as intending to show that the circulation of capital depends on the manner of its employment, and that small capitals, actively circulated where employments are multiplied and various, achieve a great deal more than large capitals, located in a city with her whole dependence founded on a mere export commerce. The operation of unwise laws affecting capital will, in all countries, restrain and embarrass its free circulation; and when the laws are not such as to endanger the safe employment of capital, it will certainly disappear.

We have more capital in the southern states for our wants, than any portion of the confederacy. The absence among us of the prosperity so manifest in the northern and middle states, does not arise from any want of capital, but proceeds from the utter neglect of the south to her true and substantial interests, and the discouragements that stand in the way of investments. The unfortunate circumstances of the public credit of Mississippi and Arkansas, and the overthrow of confidence, public and private, when public obligations are dis-

regarded, visit on the whole southwest penalties that are fatal to the spirit of enterprise, and, above all, to that confidence which nourishes and protects it. The demoralizing influence of blighted public faith weakens the attachment of the people to the government, and capital and property will never trust its protection to a government without this moral support. Capital will never flow into a state that neglects the fulfilment of her public engagements; but all the savings of capital, derived from industry and economy, in such a state, will leave it—take wings and fly away to places of greater security. At this time, and within the last year, the chief buyers of stocks, for investment in New-York, were southern people—yes, Mr. President, people from Mississippi and Alabama; and yet, if capital is so scarce and money so dear as is daily announced, why does it happen that this country is furnishing capital to buy northern stocks? furnishing capital to enable our active and enterprising rivals to extend their highways and power? furnishing the aid that transfers to them supremacy, and weakens and impoverishes us? If you are true southerners, and I believe you all are, go to work and change all this by ordaining such laws as will inspire confidence at home and abroad; go to work and imitate your victorious rivals, build roads, and create stock at home, give the guarantees of honesty and security, and my word for it, you will not only entice back the capital that is leaving you, but invite it from abroad.

Whilst regarding our pursuits and laws as unfavorable to that circulation of capital known in other sections of the Union, there is another cause that is dealing out its influences. Lately, there has sprung up, in consequence of the slavery agitation, an uneasy feeling. The wicked and insane meddling of the enemies of our institutions, of our peace and tranquillity, and the perpetual discussion of the question, north and south, contributes largely to unsettle confidence, and to work on the fears of the timid. I am not among the number to believe this evil is not to be overcome. The south, united in policy and interest, united by the ties of closer inter-communication, united by an extended and combined system of railroads, united by the development of her vast resources, and the building up of a manufacturing interest, will soon be in circumstances of power and prominence that will put at naught all the distractions that have threatened her peace, and endangered the security of the Union.

The building of railroads, the erection of manufactories, and the demand for the skill and labor that they every where create, will attract emigration to the south, will augment our white population, who will become more permanent and settled in their pursuits; and this tendency to localizing population will

prove an element of increased security to the south, one which will hasten the recovery of her lost power.

Attention to these interests will achieve far more for the south than the discussion of the platforms of political quackery, invented to advance the pretensions of their projectors.

I again repeat that the cry of deficiency in capital is unfounded; we have it in abundance for all our purposes, if it can be concentrated and circulated as it is in Wall street. There has been no period in the last five years, notwithstanding its being marked with great revolutions in trade, that money was not obtainable in New-Orleans, on good security—I mean available and convertible security, such as is recognized and current in Amsterdam, London, and New-York; I do not mean security with the incumbrance of notarial pledges, tacit mortgages, appraisement laws, fees to lawyers for collecting, and vexatious delays in realizing them. The money-lender is always the most timid of men; he has what you want, and is always willing to supply your wants, provided he is sure of escaping trouble and vexation, and the security you offer is good; but when you ask him to employ attorneys to investigate any titles, and expose himself to any uncertainty, his compliance is at an end. It is unreasonable to suppose a money-lender would be attracted by the securities and forms of law known in Louisiana; that he would hazard the profit on his loans by the fees paid to the agents of the law, and their punctual recovery by the delays of an appraisement law that extends the payment twelve months, when the property does not bring two thirds of its cash value. It is the doubt and uncertainty produced by such a condition of laws, that curtail the circulation of capital, and make it dear to the agricultural classes of the country.—*Speech of James Robb.*

NEW-YORK.—COMMERCIAL GROWTH AND GREATNESS OF NEW-YORK.—POSITION OF CITIES—ORIGIN OF NEW-YORK—EARLY HISTORY, ADVANCES, IMPROVEMENTS, POPULATION, RESOURCES, COMMERCE, PROSPECTS, ETC.—The growth of large cities depends upon the development of the mechanic arts, and the facilities they possess for communication with tracts of country around them. The larger the extent of agricultural country, which by means of avenues of communication, natural or artificial, can be brought into contact with a city, the more rapid will be its growth, and the greater the magnitude to which operating causes may carry it. While the mechanic arts and the business of exchange are unknown, it results from the regular and irresistible operation of a natural law, that large cities cannot exist. The condition of society would furnish neither the elements of their growth, nor of their preservation. The bulk of the population being agricultural—inasmuch as that food is the

first necessary—is scattered over the face of the earth, regulated by the attractions of soil and climate. The supply of wants beyond those of food, must come from cities, either manufactured or imported there; and such cities will rise in localities fixed by the natural avenues of the country. It frequently happens that the fortunes of a city change through the discontinuance of the operation of causes from which its existence was derived—as in the case of a particular manufacture which will no longer find a market. But with the decline of that trade, another may spring up to sustain the existence of the city; as, for instance, a large manufacturing town in the interior of a country may lose its market for the article which gave it importance, but may have acquired commercial habits during its prosperity, and continue a dépôt for inland trade when its manufactures are no longer profitable.

The city of New-York had its origin entirely in commercial interests. The discoverer, Henry Hudson, is said to have sold the title to the Dutch West India Company, in 1609, and they located the first permanent establishment, which was forcibly broken up in 1618 by the English South Virginia Company, who claimed the title under the discoveries of the Cabots. The Dutch having been reinstated in 1620, by order of James I., the growing importance of the place induced their government to erect it into a province in 1629, under the name of New-Netherlands. It retained this form until the government of Charles II. took forcible possession in 1664. He transferred it by letters patent to the Duke of York—afterwards, as James II., driven from the English throne for his despotic follies. From him it received the title of "New York." In 1673, when the Dutch ruled the ocean, entered the Thames, and burnt the British shipping—at the moment Charles and his court were playing at romps at the house of the Duchess of Portsmouth—New-York passed into their hands. It was restored to the British by treaty in 1674. Through all these changes the colony preserved its commercial character. The causes of its origin had little analogy with those of other settlements. New-England, Pennsylvania, and the southern states, had more the character of religious asylums for the oppressed than New-York, which was located purely by commercial adventurers with a view to trade, and this distinctive character it has retained to the present day. The first charter of the city was granted by James II. April 22, 1686. The mayor, recorder, sheriff, town clerk, and clerk of the market, were appointed by the king, directly or indirectly; aldermen and assistants were chosen annually by the inhabitants of each ward. The corporation, styled "The Mayor, Aldermen, and Commonalty of the city of New-York," were authorized to make improvements, but not to

interfere with vested rights, but by consent of the owners. In 1708, Queen Anne confirmed the charter, and gave power to establish ferries. In 1782, George III. confirmed the charter, with modifications. The city was made free, and the power of the corporation increased, particularly in respect to the right of making improvements without the limitation or assent of private owners, required by the grant of James. Since then, the changes in the city charter, by acts of legislation and by state constitution, have been mostly modifications of the charter of George III. The charter, as it now stands, is a singular illustration of the changes which have been wrought in the government of the United States, by their transition from a state of colonial subjection to national independence, and by the general progress of opinion throughout the country. It is a fabric of arbitrary powers resting upon a popular basis. Almost all the grants of English kings have been retained, but in confirming and extending the authority of the municipal government, its organization has been subject to the popular principle of representation, and the citizens have, directly or indirectly, a voice in the election of officers. The most arbitrary and oppressive existing power is that of taxing property *beyond its value*, for purposes of improvement. Did this not rest on forms of popular sanction, insurrection and revolution would be the immediate result. Another is the power of police justices to arrest and imprison an individual at their own discretion, without the form of trial by jury, for six months. That this extraordinary power exists, is the best proof that it has never been abused.

The police of New-York has been rather remarkable for success in detecting, than for vigilance in preventing, crimes. There are few instances of a crime of any magnitude having been perpetrated, in which the actors have eluded punishment. Still, the city has had the reputation of having the worst police of any northern city. Of late it has been organized on a new footing, which has been found four times as expensive, if not more efficient, than the old.

POPULATION OF NEW-YORK.—The population of the city has progressed with remarkable rapidity. The aggregate numbers of the city and state, from remote periods, compare as follows:

	State.	City.
1696.....	20,000 ..	4,302
1731.....	50,000 ..	4,322
1756.....	100,000 ..	10,881
1773.....	163,000 ..	21,870
1786.....	301,100 ..	24,614
1790.....	340,121 ..	33,131
1800.....	586,756 ..	60,489
1810.....	959,049 ..	96,372
1820.....	1,372,812 ..	123,706
1825.....	1,616,458 ..	166,086

	State.	City.
1880.....	1,918,608 ..	302,589
1835.....	2,174,517 ..	270,089
1840.....	2,428,921 ..	312,710
1845.....	2,604,495 ..	370,102
1847*.....	2,674,768 ..	394,457

Prior to the first regular enumeration of 1790, the figures depend upon uncertain data, but thus given as from the best authorities.

We have remarked that the origin and growth of New-York have depended, in an eminent degree, upon commerce; accordingly, the ratio of increase of the population has always fluctuated with the course of events in regard to general commerce. Whenever the general trade of the country, from whatever cause, increased in magnitude, the resources of the city of New-York, which early began to assume the character of a general market for the whole country, was brought into full operation. An increased demand for men and money arose, which was supplied rapidly from other quarters. The first great increase in the city population, was from 1790 to 1800—according to the ratio of which, the population would have doubled in twelve years. That decade was one of unexampled commercial prosperity. The old world, involved in wars, was making constant demands upon the industry of the new; and the produce of the interior and of the neighboring states was pressing to the Atlantic, whence the shipping of New-York carried it abroad, and returned with goods for distribution. The amount of business transacted in New-York wonderfully increased, and its attendant profits drew thither capital and men to participate in them. The decade 1800 to 1810 presented a change in affairs. More than half of that period was fraught with reverses. Captures, condemnations, embargoes, and acts of nonintercourse, diminished the capital of the place, as well as the profits. They discouraged enterprise, and the general depression of business relaxed the stimulus that had drawn numbers to the city in the previous decade. In the succeeding ten years, actual war destroyed the commerce that before languished. From 1812 to 1815 foreign trade was extinct, and no principle of income was in operation. From 1815 to 1820, trade again revived; but the rate of increase from 1810 to 1820 was far below that of any other decade, while the increase in the population of the whole state was more rapid than

ever; a fact which, in an extraordinary degree, evinces the importance of commerce to the prosperity of New-York. From 1820 to 1825, commerce was prosperous, and the population of the city swelled in proportion. This is to be remarked, however, that commerce did not recover the degree of prosperity it had enjoyed from 1790 to 1800, for the obvious reason, that European wars had ceased, and industry and navigation had revived, to deprive America of the sort of monopoly she had previously enjoyed. In the year 1825, a new element of prosperity was brought into operation, in the construction of the Erie canal, which opened to the command of the city not only the agricultural products of the fertile valley of the Genesee, but also of the whole coast of the northern lakes. The prosperity growing out of this accession of wealth, added to the general speculative disposition apparent throughout the world, conspired to make New-York the focus of financial and commercial operations; and from 1830 to 1835, the largest actual increase in numbers took place, which ever occurred in the space of five years. From 1835 to 1837, the speculative fever continued to rage, and the population of the city to increase. From 1837 to 1840, the revulsion took place, and with it a desire to leave the city for western enterprise returned. Farms which had been turned into building lots for paper cities, were again put under the plough. During the speculative mania real estate rose in price, and the island was laid out in town lots to its utmost limits. Large quantities of goods were manufactured on credit for southern and western consumption; importations were immense on credit, sales as large, likewise on time. All these operations gave employment to, and created a demand for, work-people, whom the high wages drew into the city. Business and capital also flowed thither, and the numbers of the people, as well as the sale of real and personal estate, rapidly augmented. When the revulsion took place, the reverse of this picture was presented: building stopped, real estate fell in value, large operations failed, people were thrown out of employ, and many left the city to seek, through the exercise of industry in the western country, the fortunes they had hoped to realize in city speculation. The income from 1835 to 1840 was much less than in the previous term of ten years; and for the decade ending with 1845, the increase was something less than that ending with 1835. The growth of the city by wards, since 1835, has been as follows:

* Estimated according to the ratio of increase in the preceding five years.

CENSUS OF THE CITY OF NEW-YORK.

Wards	1835	1830	1825	1820	Males	Females	Total
1st.....	9,999	11,331	10,380	10,029	6,549	5,681	12,230
2d.....	9,315	8,203	7,549	6,394	3,947	3,015	6,962
3d.....	10,201	9,599	10,884	11,581	6,446	5,451	11,900
4th.....	12,310	12,705	15,349	15,770	12,138	8,682	21,000
5th.....	15,093	17,732	18,485	19,149	9,501	10,861	20,362
6th.....	20,061	13,570	16,837	17,198	9,716	44,907	19,345
7th.....	14,192	15,873	21,481	22,982	14,239	16,607	30,846
8th.....	24,285	20,739	26,576	20,073	14,296	16,612	30,907
9th.....	10,956	22,810	20,618	24,796	10,010	10,983	20,993
10th.....	22,932	16,338	20,926	29,036	12,339	13,930	27,259
11th.....	7,344	14,915	17,052	6,879	6,499	13,378	13,378
12th.....	7,938	11,808	24,437	11,652	10,750	11,661	22,411
13th*.....		12,598	17,186	18,517	10,066	11,038	21,103
14th*.....		14,228	17,306	20,225	8,142	11,310	19,452
15th†.....			13,292	16,754	18,723	20,614	48,337
16th‡.....				22,273	12,556	14,591	27,147
17th§.....				18,619			
Total	166,086	202,589	270,089	312,712	180,365	190,737	371,190

There is now an Eighteenth Ward, constituted in 1846, from the others. The great increase in the population is in the up-town wards; and it has been promoted, or in fact made possible, only by increased facilities of locomotion.

Manhattan Island presents somewhat the form of a boot—whereof the toe is the Battery, and the heel Corlear's Hook, on the East river. Broadway runs from the Battery longitudinally, dividing the island in nearly equal halves. On the East river side are the Bowery and East Broadway, forming two main arteries through which the population circulates to the upper wards. The Harlem railroad, commencing at the Park, one mile from the Battery, runs up Centre street, through Bowery, continuing on the Fourth avenue eight miles to the Harlem river, and forms a great artery for the city travel. About the year 1830, when the city had about half the population that it now contains, the difficulty of living at a distance up town, when nearly all the business is transacted in the triangle formed by a line drawn from East to the North river, at three fourths of a mile from its apex to the Battery, was very great. That difficulty operated much against the growth of the city, and favored the growth of Jersey City and Brooklyn, across the ferries. About that time the Harlem railroad was projected, and the omnibuses introduced. Thus, a number of gentlemen doing business down town, employed a coach, at 12½ cents each, to take them home to dinner. From that beginning the omnibus business has grown until this year the number licensed is 861, and the license money paid, \$5,910. The capital employed is, for vehicles, \$200,000; horses, \$180,000; harness, &c., \$100,000; building, &c., \$250,000. Total capital, \$730,000. These omnibuses form eighteen lines, that run from

all parts of the city to the Battery, bringing down thousands to their business, and thence diverging to all parts of the city, in a fan-like form, running to Twenty-seventh street, which is 8½ miles from the Battery. They, as also the Harlem railroad, take passengers this distance for 6½ cents each. These constitute the means of the increase of the city. They make the up-town lots available for the dwellings of those doing business down town, and have therefore greatly raised the value of real estate in the upper parts of the city.

The streets are laid out irregularly below Fourteenth street. Commencing with Fourteenth, they run two miles in straight lines from East to North river, and at equal distances from each other, being numbered up to 155th street, which is 9½ miles from the Battery. Longitudinally, run ten avenues from Fourteenth street to 155th, being numbered from 1 to 10 from East to North river.

One of the greatest elements in the growth of New-York, has been the development of the coal trade of Pennsylvania, which affords an ample supply of cheap fuel to meet the growing demand. Where wood is in common use as fuel, a great augmentation in price inevitably follows an increase in the number of the consumers, to say nothing of the demands of steamboats and factories. Forests are limited in their power of production. A large and increasing population will consume more rapidly than nature can produce; and the demands of an augmenting population upon new lands for agricultural purposes are constantly narrowing the limits within which the powers of nature are in operation. Old countries have, therefore, of necessity, penetrated the bosom of the earth for those supplies which could no longer be found upon its surface. The importance of coal mines to manufacturing industry

* These two Wards were constituted in 1836—the Thirteenth from the Tenth, and the Fourteenth from the Sixth and Eighth.

† Set off from the Ninth Ward in March, 1832.

‡ Taken from the Twelfth Ward in 1836.

§ Taken from the Eleventh in 1837.

is quite as great, as there is no country of full population where furnaces, if dependent upon the productions of the forest, would not yield to such an extension of agriculture as would be necessary to supply its inhabitants with the means of subsistence.

About the year 1825, when the Erie canal was about to give such an impulse to the business of New-York, the mining of the great Pennsylvania coal basin commenced a supply of fuel, which has become one of the most remarkable features in our national industry. The great coal valley of Pennsylvania is 60 miles long and 5 miles wide—covering 800 square miles, or 192,000 acres. The several mines discovered and probed amount in thick-

ness to 70 feet—which, according to the usual estimate of coal, gives 119,000 tons per acre. If half of this region should be worked, it would supply an annual demand of 11,000,000 tons for 1,000 years.

This is the ample depot of fuel for the service of Atlantic cities, opened in 1825, when the export was 34,598 tons. There have been since constructed five great avenues to bring that coal to market, viz.: the Lehigh canal, the Schuylkill, the Delaware and Hudson, the Morris canal, and the Reading railroad. These five works cost, in round numbers, \$28,000,000, and the quantity of coal brought down has been as follows:

	Schuylkill Canal	Reading Railroad	Lehigh	Delaware	All others	Total tons
1820	58,964		41,750	43,000		174,734
1835	338,508		131,250	90,000		560,758
1840	452,251		225,288	144,470	30,365	853,444
1842	491,603	49,290	272,129	203,258	84,737	1,108,081
1847	130,143	1,350,567	636,015	332,144	228,936	2,708,867

Before the construction of the Reading railroad, the Schuylkill canal had a monopoly, and the price in New-York was held as high sometimes as \$14 per ton—a price which greatly retarded the bringing of it into general use. When the railroad was completed, it speedily took the business, and now delivers one half the supply. By this competition the price was reduced, and at retail in New-York varies from \$5 50 to \$6 per ton. It is now \$6. At this rate the value of the product this year is \$16,217,142. A large proportion of this fuel is consumed in the city of New-York. It is manifest how great an influence the development of this trade has had upon the prosperity of the city.

As we have stated elsewhere, the population of New-York is exceedingly diversified, and has perhaps less of national character than most other cities. Indeed, its floating population is largely supplied from immigration. The number of immigrants that have arrived in New-York for four years, ending July 31, is as follows:

1843-4	51,307
1844-5	70,330
1845-6	91,280
1846-7	152,166

The whole number of arrivals for twelve years was 855,366. The large immigration of the last year was mostly owing to the distress and famine abroad. Of the arrivals in 1846, 54,226 were from British ports; and in 1847, 68,738 came from the same quarter. The constant influx of strangers produces a mixed population, inasmuch as that a large portion of each arrival remains in the city. Thus, according to the census of 1845, the nationality of the inhabitants was as follows:

Born in New-York State	194,916
" New-England States	16,079
" Other United States	25,572
" Mexico and South America ..	508
" Great Britain	96,581
" France	3,710
" Germany	24,416
" Other places	3,277

This gives a total of 365,059—which shows a discrepancy of 6,043 from the return in the above table. This arose from the fact that the returns of the 15th ward, as first made, were not received by the commissioner, and a re-enumeration was made of that ward, without describing the nationality.

This population, numbering in round numbers 400,000, now densely covers one third of Manhattan Island; and at the same rate of increase that has been carried on in the last 30 years, the year 1880 will find the whole island densely settled to Harlem river, with a population of 1,200,000 souls. The increase of New-York and Brooklyn, compared, has been as follows:

NEW-YORK.

	Population	Increase
1820	123,706	
1830	202,537	63.8 per cent.
1840	312,710	44.7 "
1845	371,102	17.3 "

BROOKLYN.

	Population	Increase
1820	7,175	
1830	15,396	114.6 per cent.
1840	36,233	136.3 "
1845	59,566	64.3 "

This great increase of Brooklyn, which has raised it nearly to half what New-York was in 1820, has grown out of the fact that, to be near business, and to escape the high taxation of New-York on personal property, many persons do business in the city, and reside across the ferry.

ASSESSED VALUE OF PROPERTY.—The value of property in New-York has fluctuated greatly in those years of speculation and revaluation to the influence of which, on the prospect of population, we have alluded.

AGGREGATE VALUE OF ASSESSED PROPERTY IN NEW-YORK.

1816.....	\$82,074,250
1817.....	78,895,735
1818.....	80,254,091
1819.....	79,118,061
1820.....	69,580,758
1821.....	68,285,070
1822.....	71,289,144
1823.....	83,431,170
1824.....	87,480,026
1825.....	101,160,046
1826.....	107,447,781
1827.....	112,211,928
1828.....	111,130,240
1829.....	112,526,016
1830.....	125,288,518
1831.....	139,280,214
1832.....	140,802,618
1833.....	166,495,187
1834.....	186,548,511
1835.....	218,723,703
1836.....	309,500,920
1837.....	263,837,850
1838.....	264,152,941
1839.....	266,789,130
1840.....	252,843,163
1841.....	251,777,702
1842.....	237,806,901
1843.....	228,001,889
1844.....	235,960,047
1845.....	239,995,517
1846.....	244,952,404
1847.....	247,152,808

This gives the taxable value for thirty-two years, from the close of the war, through all the vicissitudes of the revolution in 1820–21, when the late United States Bank came near its suspension, the recovery of business and the impulse given to it by the opening of the Erie Canal, until trade ran into the wildest speculation, carrying values to their highest point, in 1836. From that year, as speculation subsided, valuations fell year by year, until 1843, when they reached their lowest point, at a fall of \$81,499,031, equal to the whole value at the close of the war. Since 1843, the values have again been in advance. This recovery has been, however, altogether on the side of real estate, the valuation of personal estate

having continued to decline. The mode of valuation, however, and the high rate of taxes imposed, have conspired to make the assessment a very uncertain criterion of the real increased personal property.

For the last few years a law has been in force requiring the valuation to be made in each year between the second Tuesday in May and the fifteenth of August; and giving to the inhabitants who may at that season of the year be residing out of the city, the option of being assessed for personal property either in the city, or in the places of their summer residence. For several years past the rate of taxation has been so high in the city, that these citizens, who are both numerous and wealthy, find it for their interest to pay their personal tax in the country, by which they make a saving, commonly, of more than one half. If they reside out of the state during the period between the second Tuesday in May and the fifteenth of August, the chance is, that they pay no personal tax any where.

The following table shows the relative increase of real and personal property with the annual taxation of the city, which includes the county:

ASSESSED PROPERTY OF NEW-YORK CITY, WITH THE ANNUAL TAX LEVIED.

Year	<i>Foreign Goods.</i>			Taxes
	Real	Personal	Total	
1835..	143,733,436	75,758,617	218,723,703	850,000
1836..	233,742,803	74,991,278	309,500,920	1,045,130
1837..	196,540,109	67,297,341	263,837,350	1,175,109
1838..	194,543,359	69,609,589	264,152,941	1,151,130
1839..	196,778,434	70,010,796	266,789,130	1,252,832
1840..	187,131,464	65,721,699	252,843,163	1,376,286
1841..	186,347,246	65,430,456	251,777,702	1,304,130
1842..	176,512,242	61,294,559	237,806,901	1,498,630
1843..	164,935,314	63,046,575	228,001,889	1,753,487
1844..	171,936,591	64,023,456	235,960,047	1,968,818
1845..	177,297,990	62,787,527	239,995,517	2,096,194
1846..	183,480,934	61,471,470	244,952,404	2,520,146
1847..	187,814,366	69,337,917	247,152,808	2,542,361

Thus we see that real estate has increased since 1843, which was the point of lowest depression, \$22,359,072, and in the same time personal property has declined \$3,200,000, while the amount of taxes has increased \$788,875, thus throwing an enormous burden upon real estate. The aggregate taxation amounts to 102.8 cents per \$200 of valuation. This includes the state tax of one mill per \$100 imposed by the law of 1842, to make good any deficit that might arise in the means of paying the state debt. In consequence of the diminished debt and the enhanced canal tolls, one half this tax has been remitted, and the remainder will be so. A new law has also been passed to make persons doing business in New-York pay taxes on the capital employed here—a law that will have a tendency to restrain the growth of Brooklyn.

The business of the city has so improved during the past year, and with it the profits of

trade have been so enhanced, as much to lighten taxation. The following is a table of the foreign commerce since 1821:

FOREIGN COMMERCE OF NEW-YORK.

Calendar year	Foreign Arrivals	Tons	Foreign Imports	Exports
1821.....	912	171,068	\$36,080,013	\$12,134,545
1822.....	1,173	236,790	\$38,912,453	14,504,594
1823.....	1,317	226,780	\$30,601,455	21,089,598
1824.....	1,364	262,769	\$7,785,147	22,309,362
1825.....	1,436	280,179	\$0,024,973	24,032,379
1826.....	1,389	274,907	\$4,798,664	19,437,329
1827.....	1,414	292,372	\$1,441,832	24,614,035
1828.....	1,377	275,677	\$9,117,016	25,135,487
1829.....	1,310	281,512	\$4,979,468	17,609,000
1830.....	1,489	314,716	\$8,658,064	17,606,484
1831.....	1,634	337,009	\$7,291,727	26,142,719
1832.....	1,808	401,718	\$5,965,924	22,792,399
1833.....	1,926	430,918	\$6,527,976	24,723,903
1834.....	1,932	444,904	\$2,234,390	22,186,081
1835.....	2,044	464,464	\$8,304,108	29,035,755
1836.....	2,285	556,790	\$12,886,194	27,456,323
1837.....	2,071	539,372	\$6,374,558	23,534,610
1838.....	1,790	466,890	\$7,314,769	22,182,348
1839.....	2,159	565,335	\$7,078,687	36,662,323
1840.....	1,933	527,594	\$6,845,924	30,186,470
1841.....	2,118	549,085	\$7,206,015	30,731,519

Calendar year	Foreign Arrivals	Tons	Foreign Imports	Exports
1842.....	1,963	555,315	\$2,415,555	\$2,090,199
1843.....	1,832	491,494	\$0,086,567	\$2,440,396
1844.....	2,908	893,373	\$7,749,230	\$4,629,440
1845.....	2,948	613,349	\$2,106,111	\$2,891,668
1846.....	2,903	612,040	\$0,269,811	\$3,423,702
1847, 11 months.			\$2,862,440	\$9,786,441

The imports of the speculative year, 1836, the same in which the assessed value of real estate was the highest, were larger than ever before. The year 1839 again presented a high figure, but the trade was of a speculative character, and ended in great revolutions. The business of 1847, in the aggregate, is, however, larger than ever before, the exports having swollen to a very important figure, reaching 50 per cent. of the imports. This has arisen from the great export of farm produce, which has been supplied in swelling volumes from that great source of commercial wealth, the Erie canal. The progress of the receipts of produce from the canals for the last ten years has been as follows:

VALUE OF PRODUCE LEFT AT TIDE WATER FROM THE NEW-YORK CANALS.

	Produce of the Forest	Animals	Vegetable Food	Other Products	Manufactures	Merchandise	Quarries	Total
1837.....	4,460,137	3,621,295	10,074,075	383,386	1,878,456	118,188	1,293,817	\$1,869,254
1838.....	4,575,730	4,430,562	10,847,566	355,527	1,574,715	89,428	853,909	\$0,038,510
1839.....	5,250,391	4,217,825	7,650,625	236,849	1,621,762	184,818	1,044,929	\$0,163,199
1840.....	4,518,293	6,167,906	10,888,917	287,140	1,312,231	33,280	1,058,806	\$2,313,672
1841.....	5,445,678	5,532,133	10,766,408	646,407	2,159,632	53,782	1,369,191	\$2,225,252
1842.....	3,741,059	4,837,615	10,840,427	494,647	1,949,541	55,482	1,542,062	\$2,751,013
1843.....	5,936,474	6,367,344	11,327,635	616,660	2,561,156	66,224	1,667,923	\$2,453,408
1844.....	7,716,032	7,708,923	12,634,616	666,527	3,489,670	86,153	2,236,536	\$4,040,440
1845.....	7,739,596	9,002,186	17,579,581	630,404	6,432,359	88,497	3,556,668	\$4,452,301
1846.....	8,689,291	10,633,930	\$2,266,906	742,093	4,804,799	276,573	3,770,476	\$1,104,256

In these ten years it is observable that the materials of commerce, derived from a work not in operation in 1825, have doubled, adding \$51,105,256 to the value of articles which sought New-York for a market twenty years

previously. The accounts for 1847 are not yet made up; but the amount will far exceed that of 1846. The following shows the quantities of four articles that sought tide water in several years:

	1843	1844	1845	1846	1847
Flour, bbls.....	2,072,708	2,932,204	2,517,250	3,068,441	3,693,270
Wheat, bushels.....	827,346	1,362,249	1,620,083	2,950,636	3,801,961
Corn, ".....	186,616	17,861	35,803	1,610,149	5,968,776
Barley, ".....	543,998	818,472	1,137,917	1,437,953	1,943,372
Bacon, lbs.....			965,200	9,034,600	3,562,030
Butter, ".....			\$1,700,708	21,194,008	22,653,961
Lard, ".....			3,097,087	7,247,966	6,237,480
Cheese, ".....			\$7,366,779	85,007,393	40,650,006
Wool, ".....	6,316,400	7,672,300	9,417,500	8,553,826	11,221,384

These large supplies of vegetable food go to swell the external commerce of the city, and are capable of meeting almost any demand which the exigencies of Europe may require, while they furnish the means of paying for the large importation from abroad; they also

create the credits in New-York, through which the producers are enabled to pay for increased supplies of goods, both domestic and imported, received through the Erie canal. The shipping interest of New-York has progressed in the manner indicated in the following table:

	1833	1836	1840	1843	1846
Registered tonnage.....	123,052	192,030	303,536	236,970	260,942
Whaling, ".....	6,355	834		570	879
Steam, ".....					1,875
Total registered tonnage.....	129,807	192,864	303,536	236,340	260,966
Coasting ".....	148,303	192,996	106,805	\$14,800	264,782
" steam ".....	13,113	19,081	24,754	36,317	45,182
" under 20 tons ".....	7,974	8,999	9,441	9,745	1,439
Oodfishery ".....	135	171	280	303	303
Total tons.....	288,381	404,814	414,517	606,965	572,222

According to the laws of the United States, no vessel can be engaged in the foreign trade without being registered; and no vessel can be employed in the coasting trade without being enrolled or licensed. The registered tonnage, therefore, gives the amount engaged in foreign commerce, showing, comparatively, its progress, and the enrolled, the same in regard to the coasting trade. The shipping of New-York is mostly employed in direct trade, while the carrying trade, so called, is mostly conducted by eastern vessels. The business of navigation is in some degree distinct from that of commerce, inasmuch as the former may be carried on by a country that has no productions, while the latter depends upon surplus productions. Of this latter character is New-York commerce, and it thrives most in those years in which the national exports are largest. Not until 1846 had New-York any steam tonnage engaged in the foreign trade. The new line of Bremen steamers is the first enterprise of the kind, and the business of \$5,000,000 Germans is by it brought in closer connection with New-York. The steam tonnage engaged in the coasting trade has more than tripled since 1833. The tonnage engaged in the foreign and coasting trade appears to have progressed in each branch in nearly an equal degree.

In the progress of population, trade and value of property belonging to the city, it has necessarily resulted that the active moneyed capital has progressed also. To take the increased capital employed in all as a guide in estimating the amount of existing wealth, would be incorrect; for the reason that although insurance capital amounts to \$31,000,000, it consists, for the most part, in bonds and mortgage upon real estate, and is, therefore, only a representation of the property already considered under the assessed values. In New-York almost every species of fixed property, by means of hypothecation in one form or another, becomes circulating capital, which is constantly changing its form and yielding at every conversion a profit to its employers. In regard to calculation connected with the activity of commercial transactions, the amount of bank capital becomes a more direct guide. In 1826 there were fourteen banks in operation in the city, with an aggregate capital of \$13,600,000, exclusive of the branch of the United States Bank, which was authorized to employ \$2,500,000. At this time there are in New-York twenty-five banks, with an aggregate capital of \$24,311,760, and the capital of twenty-three of these institutions is assessed as follows:

Owned in New-York city.....	\$13,872,188
“ state	2,052,458
“ other states.....	4,025,871

Owned by the state.....	271,704
“ foreigners.....	2,534,445
Total.....	\$22,856,659

The capital employed in banking* at any one time is not, however, a precise indication of the activity of business, as thus—in November, 1843, the same capital was the basis of \$65,314,129, which had loaned \$80,278,529 in November, 1847, showing that the activity of business as indicated in the table of imports and exports, was one third greater this year than in 1843.

The city of New-York has a large debt contracted for the construction of the Croton aqueduct, by which the city is now supplied with water. The Croton river is a stream of wholesome water running into the North river, and is tapped at a point called Croton lake, covering 400 acres, and containing 500,000,000 gallons, by the aqueduct, at a distance of 33 miles from Harlem river. That whole distance is connected by an uninterrupted conduit of stone and brick masonry. The valley of the Harlem river is 1,460 feet across, and the aqueduct is brought over in iron pipes, laid upon a bridge constructed of arches, 114 feet above high water mark, at Yorkville, or 79th street, on 7th Avenue, five miles from City Hall. The pipes discharge into a reservoir 1,826 feet long and 836 feet wide, having an area of 35 acres and a capacity of 150,000,000 gallons. From the receiving reservoir a double line of iron pipes, three feet in diameter, convey the water two miles, to the distributing reservoir, on 42d street. It is 420 feet square, contains 4 acres, and has an elevation of 44 feet above the streets, and a capacity of 20,000,000 gallons. From this reservoir are led the serving pipes which supply the city, and are about 170 miles in length, or 1 mile to 2,240 inhabitants. This will supply 35,000,000 gallons of water per day, or 24 gallons to each person when the population shall have reached 1,500,000. This stupendous work cost in the neighborhood of \$14,000,000, and was undertaken by a direct vote of the people on the question—“water” or “no water.” The water is supplied to dwellings at a general rate of \$10 per head, beside 600 free hydrants and 1,500 fire hydrants. The income of the water is specially pledged as a sinking fund for the redemption of the debt. The number of water takers in 1844 was 7,171 private dwellings, paying \$72,128, and 2,421 public buildings and factories, paying \$59,660, making together 9,592 water takers, paying \$131,784. In 1846-7, the number of takers had increased to 15,000, and the revenues to \$194,561. The public debt created chiefly for this object is as follows:

NEW-YORK—COMMERCIAL GROWTH AND GREATNESS OF.

PUBLIC DEBT, CITY OF NEW-YORK, 1847.

		Annual Interest
5 per cent. city stock of 1830 and 1832, due in 1860.....	\$250,000 00	13,500
5 " fire loan stock, due in 1851	500,000 00	25,000
5 " public building stock, due in 1856	516,000 00	25,750
5 " fire indemnity stock, due in 1868	376,088 00	18,764
	\$1,642,088 00	82,004
Water debt as follows:		
7 per cent. water loan stock, due in 1832	890,237 00	62,314
7 " " " " 1837	998,488 00	69,964
5 " " " " 1856	3,000,000 00	150,000
5 " " " " 1860	2,500,000 00	125,000
5 " " " " 1870	3,000,000 00	150,000
5 " " " " 1880	1,375,577 00	68,773
5 and 6 per cent. Croton water stock, due in 1880	286,000 00	15,100
6 per cent. temporary water loan, before 1840.....	757,910 00	45,474
	\$12,898,182 00	767,929
Deduct proceeds of water stock in banks, to the credit of the water fund.....	110,166 33	\$12,788,015 67
Nominal amount of debt.....		\$14,428,103 67
Less stocks and bonds in sinking fund, from sales of real estate and revenues specially pledged for the redemption of the city debt, and cash in bank, to credit of the fund.....		\$ 2,679,724 28
Actual amount of city debt on the 30th April, 1847.....		\$11,748,379 39

An ample sinking fund is in active operation to redeem this debt completely in a period of forty years. The expenditure of the city, as indicated in the above table of annual tax imposed, is, for 1847, \$2,542,361; out of this \$147,000 was for state tax. The leading general heads of city expenditures are—common schools, \$261,000; police, \$400,000; almshouse, \$348,000; interest city debt, \$767,000; lamps and gas, \$129,137; cleaning streets, \$135,000; water pipes, \$54,403; salaries city officers, \$238,000, and the balance for sundry expenditures.

The city of New-York has paid much the largest portion of the state tax, as thus: in 1842, when the mill-tax was imposed, it amounted for the state to \$619,698; of this New-York city paid \$237,807, or two fifths of the whole. The census of 1840 gives the state population at 2,428,921, and the city at 312,932—or one eighth only of the population. The property owned by the city of New-York consists of two descriptions, viz: property embracing town lots, common lands, quit-rents, and various real estates, valued at \$2,638,682, and yield \$64,240 per annum; city real estate, in use for city purposes—City Hall, parks, grounds, schools, markets, &c., valued at \$22,468,397, and producing \$403,356 per annum, as follows:

	Value	Income
Available property....	\$ 2,638,682	\$ 64,241
Not saleable.....	21,468,398	403,356
Total.....	\$25,107,080	\$467,597

Although New-York, through force of geo-

graphical and external circumstances, has grown thus rapidly, there have been many causes in operation to retard its progress. These have grown mostly out of vicious legislation, general and local. In recurring to what we have pointed out in the fluctuation of the city's prosperity with the flourishing or decaying state of the external trade, it becomes evident the welfare of the city depends, in an eminent degree, upon the entire freedom with which capital, in the shape of goods, produce or money, can flow securely in and out to profit by the current state of events. New-York holds a relation to the whole trade of the Union different from that of any other city—and also far superior in regard to it, than that held by any commercial city in Europe, in regard to the interior country. All the other cities of the United States are centres of local business. Mobile concentrates that of Alabama; Charleston of South Carolina; Georgia and Baltimore of the tract watered by the tributary streams. Philadelphia looks mostly to her own state, having, however, stretched forth an arm through her canals to western tracts. Boston is the common centre for New-England business, and well has she improved her local advantages by means of railroads—of which 700 miles open every remote section of the New-England states, and converge within every trade and travel upon Boston; she has also greatly enlarged her connection with the west, by overcoming natural difficulties by means of the Western railroad. New-York, however, by its canal, makes tributary the whole northern and western states, and her shipping commands the coasting trade to New-Orleans.

NEW-YORK—COMMERCE, 1849-51.

EXPORTS FROM NEW-YORK TO FOREIGN PORTS FOR THE FISCAL YEAR ENDING JUNE 30, 1852.

MONTHS.	Domestic Produce.	Foreign Dutiable.	Foreign Free.	Specie.	Total.
July.....	\$3,188,027	\$284,397	\$2,311	\$6,004,170	\$9,478,905
August.....	3,259,594	334,549	22,974	2,678,444	6,290,561
September.....	2,593,986	316,047	134,271	3,490,142	6,524,446
October.....	2,702,382	358,292	106,626	1,779,707	4,947,007
November.....	2,451,511	397,597	62,368	5,033,996	7,945,472
December.....	2,512,486	351,428	21,918	5,668,235	8,554,017
January.....	2,419,296	358,244	26,693	2,868,958	5,673,191
February.....	3,352,943	322,272	93,932	3,551,543	7,320,690
March.....	4,313,245	357,230	100,557	611,994	5,883,026
April.....	4,244,044	358,262	67,719	200,266	4,865,291
May.....	4,249,924	545,973	106,818	1,834,893	6,737,608
June.....	3,566,869	462,594	125,500	3,556,355	7,780,818
Total.....	\$38,858,757	\$4,461,885	\$871,687	37,273,703	\$81,461,032

Those items for several years compare as follows:

	1848.	1849.	1850.	1851.	1852.
Domestic Produce.....	\$33,638,844	\$33,226,419	\$33,227,676	\$47,496,978	\$38,858,757
Foreign, dutiable.....	2,693,597	3,614,915	5,433,761	6,107,498	5,332,572
Specie.....	12,028,794	4,629,873	5,885,103	26,622,731	37,273,703
Total of Exports.....	\$38,361,235	\$41,471,207	\$44,546,540	\$80,227,207	\$81,461,032
“ Imports.....	91,668,888	89,464,540	112,968,593	126,270,705	98,801,134

This presents a gradual increase in the exports of the port, and to a greater extent than the imports. It also shows the influence of California in developing the trade. That new region has absorbed a large amount of produce and domestic manufactures that would not sell readily in Europe. The in-

dustry of California has given a product in exchange which sells readily at all times; and the United States domestic productions have been raised by the addition of gold which Europe will take when she does not want foreign produce. The importations at the port have been as follows:

	1849.	1850.	1851.	1852.
Specie.....	\$2,807,637	\$10,502,115	\$10,390,501	\$2,528,891
Free Goods.....	8,023,581	7,890,878	8,321,042	11,926,912
Dry Goods.....	36,417,112	46,342,271	58,065,611	48,900,935
Other Dutiable.....	42,166,210	48,233,329	49,493,551	35,444,896
Total.....	\$89,464,540	112,968,593	126,270,705	98,801,134

The following table gives the quantity of goods entered for consumption, and the quantity entered for warehousing, being the gross imports; also the aggregate withdrawn

from warehouse, and that entered for consumption, being the quantity put on the market:

IMPORTS ENTERED AT NEW-YORK FROM FOREIGN PORTS FOR THE FISCAL YEAR ENDING JUNE 30, 1852, COMPARED WITH THE PREVIOUS YEAR.

MONTHS.	Entered for Consumption \$	Entered Warehouse \$	Free Goods \$	Specie. \$	Total. \$	Withdrawn from Warehouse.	Total thrown on the Market.
July.....	12,374,701	1,022,725	1,027,481	81,143	14,506,050	1,167,044	14,650,960
August.....	11,379,004	1,358,089	638,334	186,603	13,461,930	1,352,245	13,356,086
September.....	8,384,172	804,916	366,153	115,550	9,730,791	1,069,304	10,535,179
October.....	5,790,795	1,304,994	1,558,720	23,165	8,577,674	1,602,436	8,975,116
November.....	4,309,085	938,056	415,838	218,473	5,971,432	1,377,100	6,410,496
December.....	5,073,162	1,050,185	375,601	95,376	6,724,324	1,117,456	6,791,595
January.....	8,584,311	1,381,504	1,041,456	104,736	11,012,097	1,584,652	11,315,165
February.....	7,024,952	1,093,383	1,110,949	110,293	9,249,577	1,788,997	10,035,191
March.....	9,302,024	916,519	1,843,938	525,421	12,567,902	1,605,849	13,277,232
April.....	8,410,448	732,422	1,496,449	327,400	10,966,710	1,255,429	11,489,735
May.....	6,096,996	453,109	780,046	380,684	7,719,735	1,380,371	8,646,997
June.....	7,626,181	640,722	1,062,947	429,747	9,759,597	911,479	10,030,354
Total.....	94,345,331	11,466,714	11,996,912	2,528,391	120,367,548	16,712,962	125,514,096
Do. 1850-51.....	107,559,164	14,802,824	8,321,042	10,390,501	141,073,531	12,901,313	138,472,020

Last year, under the large imports, there was an excess of goods warehoused. This year there is an excess withdrawn, making together a difference of nearly \$8,000,000. The dry goods, as compared with others, seem to have been as follows.

	Entered Warehouse.		Withdrawn.	
	1851.	1852.	1851.	1852.
Dry Goods.....	\$6,940,219	\$8,471,478	\$5,700,816	\$7,474,659
All other.....	7,862,605	2,995,236	6,500,497	9,238,328
Total.....	\$14,802,824	\$11,466,714	\$12,201,313	\$16,712,982

The diminution in warehouse stock seems to have been almost altogether of merchandise other than dry goods. The warehouse operations are annually becoming more important, being already 16 per cent. of the goods passed into consumption.

RELATIVE VALUE OF THE REAL AND PERSONAL ESTATE IN THE CITY AND COUNTY OF NEW-YORK, AS ASSESSED IN 1851 AND 1852.

Wards.	ASSESSMENTS OF 1851.		ASSESSMENTS OF 1852.		TOTAL.	
	Real Estate.	Personal Estate.	Real Estate.	Personal Estate.	1851.	1852.
I.	\$29,782,583 00	\$30,361,864 42	\$30,828,183 00	\$40,671,503 76	\$60,143,947 42	\$71,499,686 76
II.	15,477,300 00	2,063,663 19	15,999,795 00	2,947,672 50	17,540,963 19	18,947,397 50
III.	14,409,650 00	8,831,745 54	16,656,300 00	19,769,472 86	23,321,395 54	26,425,772 86
IV.	8,238,620 00	1,352,045 00	8,407,420 00	1,571,567 00	9,590,685 00	9,978,987 00
V.	10,942,950 00	2,733,664 00	10,738,400 00	2,490,550 00	13,026,614 00	13,228,950 00
VI.	7,857,950 00	1,127,450 00	8,104,850 00	1,303,250 00	8,985 100 00	9,408,100 00
VII.	11,121,796 00	2,990,440 00	11,757,480 00	2,746,375 00	14,112,166 00	14,504,065 00
VIII.	11,985,300 00	2,036,039 00	12,939,960 00	1,706,373 00	14,022,139 00	14,646,533 00
IX.	11,437,950 00	1,918,493 38	11,795,800 00	1,797,648 36	13,355,843 38	13,523,443 36
X.	6,622,200 00	1,369,450 00	6,851,300 00	1,106,250 00	7,981,650 00	7,957,550 00
XI.	6,560,450 00	636,321 52	6,897,300 00	539,631 46	7,186,771 52	7,437,031 46
XII.	3,274,400 00	511,000 00	3,868,696 00	518,100 00	3,766,000 00	4,406,996 00
XIII.	4,561,800 00	630,705 73	4,699,900 00	552,505 73	5,201,505 73	5,252,405 73
XIV.	7,677,801 26	2,519,393 19	8,133,500 00	2,335,927 00	10,397,694 45	10,469,427 00
XV.	18,347,594 00	15,375,270 00	19,245,250 00	15,826,945 84	33,622,864 00	35,072,196 84
XVI.	14,870,000 00	1,020,950 00	11,375,139 20	1,608,225 00	15,890,950 00	12,983,364 20
XVII.	12,479,325 00	2,970,320 00	13,166,850 00	2,436,900 00	15,449,845 00	15,623,750 00
XVIII.	25,255,600 00	5,400,187 00	33,886,010 00	8,194,900 00	30,745,787 00	42,030,810 00
XIX.	6,614,157 00	314,300 00	8,978,380 00	255,400 00	6,929,957 00	10,133,380 00
XX.	.....	.....	7,916,300 00	210,750 00	With 16th Wd.	8,136,950 00
Total..	\$227,015,855 26	\$193,095,001 97	\$252,186,753 20	\$298,530,042 53	\$320,110,968 53	\$351,706,795 73
Total valuation in County.....						\$351,706,795 73
Total valuation in Lamp District.....						387,529,246 73
Total valuation south of centre of Forty-second street.....						338,086,019 73

NORTH CAROLINA.—COLONIAL, REVOLUTIONARY AND SUBSEQUENT HISTORY.—PHYSICAL CONDITION.—PRODUCTIVE INDUSTRY AND RESOURCES.—POPULATION.—CHIEF TOWNS.—EDUCATION.—RELIGIOUS SECTS.—COURTS.—CANALS AND RAILROADS, &c. &c.

COLONIAL HISTORY.—The first English settlement made in America was planted in the summer of 1585, on Roanoke, an island situate in the passage between the sounds of Pamlico and Albemarle, North Carolina. The patron of the infant colony, which numbered one hundred and seven, was Sir Walter Raleigh, to whom Queen Elizabeth had granted, in 1584, a patent for such lands as he might discover in America, "not possessed by any Christian people." The same year he dispatched two small vessels to make discoveries; and these dropped their anchors early in July in Ocracoke Inlet. The adventurers landed on an island near

Roanoke, called by the natives Wococoon, where they were received by the inhabitants with every mark of hospitality. After visiting the region immediately around Wococoon, they returned to England, and gave a highly favorable account of the salubrity of the climate, and fertility of the soil. The name *Virginia* was bestowed upon the country, and Raleigh's patent was confirmed by act of Parliament. Sir Walter sent out at once, under Ralph Lane as governor, the colony above mentioned. Soon, however, the settlers became entangled in difficulties with the natives; difficulties which, originating in the imprudent conduct of Grenville, the commander of the vessels in which the colonists had come from England, kept increasing under subsequent tyrannical acts on the part of the governor, befitting a conqueror rather than the head of a peaceful colony. Hostilities broke out. The English, who had been

occupied chiefly in exploring the country, suffered soon from the want of provisions. They became discouraged, and finally, in 1686, returned home on board the fleet of Sir Francis Drake. A few days after their departure, Grenville arrived; and finding the colony gone, left fifteen men, with provisions for two years, to keep up the settlement. Undeterred by his first failure, Raleigh sent out another colony early in 1687, with orders to settle on Chesapeake Bay, where they were to build the projected "city of Raleigh." The new colonists, however, were put ashore at Roanoke. They found no traces of Grenville's party, which had, no doubt, fallen victims to the Indians' revenge. Scarcely had the new settlers landed, when they were engaged in petty combats with the natives. Their governor, White, returned, on solicitation, to England, to hasten certain promised supplies. But owing to the troubles consequent upon the threatened Spanish invasion of England, he was detained from re-visiting the colony until the autumn of 1690. On arriving, he found the site of the settlement inclosed by a strong palisade; but not a colonist remained. To the present day their fate is only a subject of conjecture. Thus ended Raleigh's attempt to colonize Virginia, in which he had spent fruitlessly upwards of \$180,000. North Carolina remained untenanted henceforth by Englishmen till the middle of the next century.

Early in the reign of Charles I. (1630), a tract of land south of the Chesapeake, designated as *Carolina*, was granted to Sir Robert Heath; but as he planted no colony upon it, it was, after a time, declared forfeited. Out of the same territory Charles II. formed, in 1663, the province of *Carolina*, and conveyed it by charter to eight distinguished royalist noblemen of England. This charter, as amended in 1665, defines the limits of the province to be the 29th parallel of latitude on the south, the Pacific on the west, the Atlantic on the east, and on the north the parallel of 36 deg. 30 min., afterwards, and now, better known as the line of the Missouri compromise. The eight grantees were made joint proprietors of the soil, and were intrusted with powers of jurisdiction over its colonists.

Already, previous to this conveyance, settlers had located in the northern part of the province. For some years, parties from Virginia, mainly dissenters seeking escape from religious persecution, had been coming, a few at a time, into the neighborhood of the sound, afterwards called Albemarle, and forming small settlements on the banks of the Chowan river. To this district the new proprietors gave the name *Albemarle*, in honor of one of themselves, the duke of that title, more extensively known in history as General Monk, the parliamentary commander, to whom Charles II. owed his restoration. Sir William

Berkley, Governor of Virginia, in connection with one of the proprietors, was authorized to assume jurisdiction over the district. A little colony had, also, been planted by adventurers from New-England, near the mouth of Cape Fear river. The soil, however, proved very unproductive, and the colony dwindled slowly away. It would soon have totally disappeared, had not some planters from Barbadoes, under Sir John Yeamans, removed thither in 1685, and formed the settlement of *Clarendon*, by which the few remaining New-Englanders were rapidly absorbed. These new settlers supported themselves with difficulty by shipments of boards, shingles and staves, yet the staple production of that region, to the West Indies. Gradually, by numerous migrations southward, the colony again became reduced, until at length, before 1690, it was entirely exhausted. The proprietaries, in 1670, sent out emigrants, under the command of William Sayle, to form a new settlement, to be known as the county of *Carteret*. The colonists located themselves first at Port Royal, (S. C.;) but they soon removed, and formed a settlement between the rivers Ashley and Cooper, which they called Charleston. Sayle dying in the following year, Sir John Yeamans, of Clarendon, was appointed Governor of Carteret, the southern province. Thus were there, in 1671, two permanent settlements in Carolina—*Albemarle* and *Carteret*. These two constituted the nuclei of North and South Carolina as now existing.

At the request of one of the proprietors, the celebrated John Locke framed a scheme of government for the whole province of Carolina. "The Grand Model," as it was called, though complete of its kind, was too complicated, if not too monarchical, for an infant colony; yet the proprietaries adopted it as the fundamental law of the province, and such, for twenty-three years, it nominally remained. As a matter of fact, however, it was never brought into operation, though the governor of each district in the province strove hard to comply with its requisitions, in spite of the continued and ultimately successful opposition of the colonists.

The settlement at Albemarle was augmented by accessions from Virginia, New-England, and the Bermuda islands. William Drummond was appointed the first governor. He was succeeded by Samuel Stevens, under whom were enacted the first laws of the colony, by an assembly composed of the governor, the council, and twelve delegates; of which the last branch was chosen by the people, the two former by the proprietors. Every encouragement was given by these laws to whomsoever proposed settling in the colony. Bounty lands were granted at a moderate quit-rent, (half-penny an acre;) taxes could be imposed only by consent of the assembly; and religious liberty was promised to mem-

bers of every Christian denomination. Intestine commotion, proceeding partly from discontent with the "Model System," and partly owing to a general feeling of restlessness prevalent sometimes in new colonies, soon disturbed the peace and welfare of Albemarle. Stevens, on his death, was succeeded by Cartwright. The latter soon retiring, Eastchurch, at the time in England, was appointed to fill the vacancy. The proprietors, to atone for a grievance which he had received from the colonists, nominated Miller, a turbulent, but talented person, then also in England, Secretary of the Government, and a member of the council. Eastchurch being detained on his way out, Miller proceeded to Albemarle, to rule as deputy-governor until the governor should arrive. His strictness in collecting the revenue excited general discontent. In consequence, in 1687, an insurrection broke out, under the lead of Culpepper, a fugitive demagogue from the southern province, and Gillingham, a New-England trader, who was about to be prosecuted for violating the revenue laws. Miller and part of the council were seized and thrown into prison. The successful insurgents assumed the government, and exercised its powers for two years. Death put a stop to Eastchurch's efforts to obtain his legal rights. Miller, escaping from prison, fled to England, whither Culpepper had also gone to justify himself before the proprietors. The latter was arrested and tried for treason, but escaped on a legal technicality. The proprietors thought it best to overlook, in a great measure, the late insurrectionary movements, and to receive the nominal submission of the insurgents. Seth Sothel, now a proprietor by purchase, was appointed governor. For six years Sothel filled the gubernatorial chair; at the end of which time, the inhabitants, exasperated by his continued tyranny and misrule, seized, and were about sending him to England. Tried, however, at his own request, by the colonial assembly, he was removed from the government and banished from the country. Sothel retired to Carteret, where the spirit of insurrection was rife, and was placed at the head of the government. He was succeeded in Albemarle by Philip Ludwell, whom Thomas Harvey soon followed in the administration as deputy-governor.

The discontent and turbulence of either province were not removed, until the arrival (1696) of John Archdale, one of the proprietors, as governor, invested by his commission with unusually extensive powers. Sagacious, and possessed of rare prudence, the Quaker Archdale succeeded, by his skilful management, in reducing both provinces to comparative order. During the late disturbances, North Carolina had received a decided check to her prosperity. Many fled the country. At the beginning of the Culpepper insurrection, the province contained 1,400 taxable inhabitants:

in 1694, 727 were all that could be found within its limits. Under Archdale, however, the colony began again to flourish. On his retirement, under Harvey, reappointed deputy governor, (1695,) under Walker, president of the council, (1699,) Daniel, in the same office, (1703,) and Thomas Carey, deputy governor, (1705,) the province was replenished with inhabitants. Settlements were made on the Pamlico river, (1698,) upon the Tar and the Neuse; and Bath county was set off to the southward. Rice and tar, two of the staples of North Carolina, began now to be exported. Churches were for the first time erected, and provision was made for sustaining a regular ministry. Religion began to receive the support of the authorities, given, however, in an illiberal and sectarian spirit, inconsistent with the promise of religious liberty made at first to the colonists. The Episcopalians, as in Virginia and South Carolina, had a majority in the legislature, which they failed not to use to the disability and attempted repression of all dissenters.

North Carolina was soon to feel the scourge of another rebellion. Carey, not giving satisfaction to the proprietors, was removed from office, and William Glover appointed to conduct the administration. Carey endeavored, at the head of an armed force, to usurp the government; and persisted in the attempt even after the arrival, in 1710, of the new deputy governor, Edward Hyde. Hyde promised to redress every grievance of which Carey complained, but the insurgent heard nothing save the wild promptings of ambition. Attacking Edenton, he was repulsed and forced to retire. Finally, Hyde, by this time (1711) governor, succeeded, with the help of regular troops from Virginia, in putting down the malcontents.

Meanwhile, the province was involved in a general war with the Indians. Since the settlement of Albemarle, uninterrupted peace had existed between the whites and the natives. As the settlement increased in numbers and extent, however, the Indians began, not without reason, to fear for their future safety. In 1707, a colony of French Huguenots had removed from Virginia, and settled on the river Trent; and in 1709, a colony of Germans, from Heidelberg and its vicinity, founded, under Baron Graffenried, the settlement of New Berns, (now Newbern,) at the confluence of the Trent and Neuse. They received a liberal grant of land from the proprietors. It was the surveying of these lands, for Graffenried, that led to the outbreak of the Indians. Regarding the surveys a direct encroachment on their independence, the Tuscaroras, who lived on the Neuse, Contentauy and Tar rivers, seized upon Lawson, the surveyor-general, on a favorable opportunity, and, after consultation, put him to death. An immediate attack was made upon the white settlements south of

Albemarle Sound, (1711,) and whole families were unsuspectingly butchered. Other tribes joining the Tuscaroras, the war became general. Bath county was exposed almost defenseless to the ravages of the enemy. All Carolina did not contain at the time 2,000 men able to bear arms; yet, when assistance was sought from the southern province, it was at once obtained. Col. Barnwell was dispatched with a small body of white men and a strong force of friendly Indians. The enemy were worsted in several encounters, and finally compelled to betake themselves to a fort near the Neuse. Here they would soon have been forced to surrender at discretion; but Barnwell concluded a hasty and disadvantageous peace. In a few days after Barnwell had returned to South Carolina, the same Indians renewed hostilities. The situation of the province had now become truly critical. Hyde dying, (1712,) he was succeeded by Pollock, by whom, as president of the council, aid was asked from Virginia and South Carolina. The governor of the latter province sent out a party of 40 white men and 800 Ashley Indians, under Col. Moore. Overtaking the Tuscaroras in January, (1713,) he attacked them in their fort near the Cotechney, and took 800 of them prisoners. His own loss was small. The captives were given to the Ashley allies as a reward for their services, by whom they were all sold into slavery. The power of the Tuscaroras was broken. Suing for peace, they obtained it on ignominious terms. The greater part of the nation, too weak to fight, and too proud to submit, removed to the north, and confederated with the Senecas, together with whom, and other tribes, they afterwards formed the "Six Nations." The other hostile Indian tribes (the Corees, Mattamuskeet, etc.) were soon compelled to submit to the rule of the victors. In 1715 peace was partially, and in 1717 finally concluded. The sufferings of the province during Carey's rebellion and the Indian war were extreme. Not a few of the settlers abandoned their homes altogether. Notwithstanding the accession of new colonies and the natural increase of the population, the whole number of taxable inhabitants in the province in 1717, did not exceed two thousand. In 1676 they numbered, as we have seen, about fourteen hundred.

Succeeding gubernatorial administrations were, for some years, unfortunate. Charles Eden, who assumed the administration in 1714, rendered himself, by his imprudence, if not criminality, obnoxious to the charge of countenancing piracy. His private and public character alike suffered, and his administration was unquiet and disturbed. He died in 1722, and was succeeded in 1723 by George Barrington, a man totally unfit for the office. Possessed only of inferior talents, imprudent in his choice of measures, and himself a street brawler and notorious rioter, he relaxed all

the bonds of wholesome government, misruling the country, till he was displaced, in 1726, by the appointment of Richard Everard to his much-abused station. The new governor was more circumspect in his conduct; but his administration was not as firm and energetic as the disturbed state of the colony required. During the term of his office, Carolina became a royal government. In July, 1729, the king purchased, for £17,500, seven eighths of the whole province from the proprietors; the remaining eighth was retained by Lord Carteret, and was laid off for him (not, however, till 1743) adjoining the Virginia line. Previous to this (1728) the boundary between Virginia and North Carolina had been settled upon its existing basis. In 1731, Everard was removed by the crown, and Barrington again, made governor. This appointment was unfortunate. Barrington could agree neither with his council, the assembly, nor the people. Incessant disputes excited incessant dissatisfaction. Justice was administered irregularly, and, it was said, not always impartially. His enemies were numerous; no party gave him its support. At last, in 1734, troubles pressing on every hand, he retired from the administration, and returned to England. Under Gabriel Johnstone, Barrington's successor, whose management was judicious, the colony prospered. The spirit of anarchy and resistance to legal authority, hitherto prevalent, was brought more under control. Still, justice and obedience to the laws were by no means universal.

During the Indian troubles, paper money had been issued by the assembly, to pay the expenses of the war; but, though gradually sunk by taxes, it depreciated. In 1729, £40,000 were issued, in bills of credit; and in 1734, £10,000 additional. Depreciation went on, until, in 1739, the bills passed at the rate of seven and a half for one. This depreciated currency the assembly endeavored in 1738 to circulate, by making it a legal tender at par for quit-rents, which heretofore had been, and now were, only payable in sterling money, foreign coin, and certain articles of produce, at a rate fixed by law. In the disputes that ensued, the governor, who opposed the issue of paper money, dissolved two successive assemblies. Other acts, equally unjust and impolitic, were passed, at various times, by the legislative body; nor was the governor himself wholly free from the imputation of irregular and partial administration. These, and other adverse circumstances, as McCulloch's speculation in crown lands, the breaking out of hostilities between England and Spain, by which the Carolinas were involved in war with the Spanish settlements in Florida, retarded, in no small measure, the progress of the colony. In spite of all, however, the increase in inhabitants during Johnstone's rule was decidedly rapid. Three distinct and ex-

tensive settlements were made, under him, within the province; one by a colony chiefly Presbyterians from the north of Ireland, who, coming by the way of Pennsylvania, settled in numbers in the northwestern part of the state, on the lands of Lord Carteret; another, by a party of Moravians, who obtained from the Earl of Grenville (Lord Carteret) a grant of 100,000 acres of land between the Yadkin river and the Dan; the third by a large body of Highlanders, chiefly from Argyleshire, for whom land had been purchased by their leader, Neal McNeal, near the present Fayetteville. All these colonies were successfully established; and their numerous descendants inhabit the state at this day.

Johnstone dying, (1752,) Arthur Dobbs was invested (1754) with the governorship. He applied himself at once to forming alliances with the Indians, lest they might join with the French in committing hostilities upon the province. Notwithstanding every effort, unfriendly tribes, especially after Braddock's defeat, (1755,) harassed the western frontiers. Among these tribes the Cherokees were foremost in committing depredations. They, as well as the upper Creeks, by whom they had been joined, were finally forced to sue for peace. As regarded the conduct of the war, the assembly concurred with the governor, but they differed widely on other questions respecting the government. An attempt on his part to have the representation in the assembly reduced, or remodelled, and his refusal to assent to an act extending the jurisdiction of the courts of law and the terms of the judges' offices, produced general discontent in the assembly. The dissatisfaction increased. To allay it, Wm. Tryon, a military officer, was sent out in the capacity of lieutenant-governor. On the death of Dobbs (1765) he was raised to the governorship. Tryon found the colony restless and unquiet. On Earl Grenville's reservation, the inhabitants, who had been hardly treated by his lordship's agents, and by petty government officers, already riotous, were ripe for open rebellion. But the new incumbent ruled with a steady hand. Early in his administration the dispute between England and the colonies began. He managed for a time to avoid collision with the assembly; but, at length, when that body unanimously declared (Nov. 4th, 1769) against the right of England to tax North Carolina while unrepresented in Parliament, he dissolved it, on account, as he said, of the passage by them of resolutions which "had sapped the foundation of confidence and gratitude." Previously to this, however, the country was distracted by a formidable insurrection of the so-called "Regulators," a body of insurgents chiefly poor and uneducated, who, complaining at first of the illegal collection of taxes, rose riotously against public collectors, dis-

solved court sessions, overawed judges, and finally refused, though offered indemnification for all losses from defrauding officers, to bear any of the burden of taxation. Abusing the lenity of the governor, they rushed heedlessly forward, under ambitious and not untalented leaders, into more daring rebellion. Neither property nor life was safe from their violence. Tryon at length (1771) raised a body of troops and marched against the Regulators. Encountering them near Great Alamance, 3,000 strong, he attacked them with his 1,000 militia, and gained a decisive victory. After their defeat, the insurgents in general took the oath of allegiance. In the following August, Tryon, who, upon the whole, had been a popular ruler, was succeeded by Josiah Martin. One of his first acts was the settlement, on its present basis, of the boundary line between North and South Carolina. Disputes soon arose between him and the assembly, respecting foreign attachments and the jurisdiction of county courts; the general trouble was increased by the persistence of England in her policy of taxing the colonies. The governor sided with the crown, as also the Regulators, whom he had the meanness to conciliate by the detraction of Tryon; but the remaining inhabitants generally adopted the cause of the colonists.

REVOLUTIONARY HISTORY.—North Carolina, in spite of Martin's opposition, was represented in the first Continental Congress, (Sept., 1774,) and its delegates joined in adopting the "Declaration of Colonial Rights." A provincial Congress, composed chiefly of members of the assembly, and the assembly itself, approved of the proceedings of the late Congress, and appointed delegates to the next. An association for the defense of colonial rights was formed, and the citizens of Mecklenburg county even went so far (May 21, 1775) as formally to declare their independence of the British connection, and renounced all allegiance to the crown. Alarmed at the progress of the association, the governor retired (July) on board a ship of war in Cape Fear river. The revolution in North Carolina was now complete. A new state Convention was formed, (Aug. 20,) and the raising of three regiments of troops authorized. They were soon increased to five, and all were taken by Congress into colonial pay. The tory influence, however, was strong, especially among the Regulators. A body of 1500 men, under McDonald and McLeod, who had been commissioned by Martin, attempted to reach the coast where Gen. Clinton, with a squadron, was waiting for assistance from Britain, preparatory to making a descent upon the country. Hastening towards Wilmington, the tories attempted to force a passage over Moore's-Creek Bridge, but were repulsed, with the loss of McLeod, by a body of militia, under Caswell. In their retreat, they ran into the

power of Col. Moore, who was advancing in pursuit, and eight hundred and fifty of them, McDonald included, were made prisoners.

Four more regiments were now (April 1) ordered to be raised by the North Carolina Congress. Clinton, though reinforced, despairing of local assistance, sailed away, accompanied by Martin, to the attack of Charleston. In the following April, the North Carolina Convention, taking the lead, authorized their delegates in Congress to join with other colonies in declaring independence. On the 4th of July following, that independence was solemnly declared. Meanwhile the Cherokees, in league with the British, ravaged the western frontiers. Promptly met by a strong force from the Carolinas and Virginia, they were subdued, and forced to surrender to their conquerors a large tract of country, including the yet infant settlements on the Tennessee. The territory apportioned to North Carolina was erected into the district of Washington, the province being now (since Dec. 18, 1776) a state, having a regular constitution, and presided over by Richard Caswell, McDonald's conqueror, as governor. Settlers were encouraged to locate in the district, lands being granted at the rate of £2 10s. the hundred acres.

Though North Carolina furnished her quota of regular troops for the continental army, and assisted in bearing the expenses of the war, it did not become for some years a theatre of military operations. From 1779, the southern states were the chief scene of the revolutionary conflict. North Carolina manfully bore her part of the burden. In May, 1780, Charleston surrendered to the British under Gen. Clinton. Within a month all South Carolina was in possession of the victors. The loyalists of North Carolina flew at once to arms. Of two parties assembled to aid the enemy, one succeeded in reaching the British outposts, but the other was dispersed by the whig militia, under Gen. Rutherford. After the defeat of Gates at Camden, (Aug. 8,) there was left no organized force in either of the Carolinas. Cornwallis prepared to make an irruption into the northern state. His troops moved forward in three divisions; the main body, under himself, advanced by Charlotte and Salisbury; another party, under Tarleton, along the Catawba; a third, under Ferguson, took a more westerly course along the foot of the mountains. Attacked by a body of mounted backwoodsmen, the latter was completely routed (Oct. 9) at King's Mountains. Hearing of this disaster, Cornwallis marched back to Winnsboro', in South Carolina. As he retired, Gates advanced to Charlotte with a force, small and ill provided for, which he had organized partly from new North Carolina recruits, and partly from the survivors of the fatal field of Camden. At Charlotte, Gen. Greene joined the army, (Dec. 2,) and assumed the command.

The mutual animosity of the whigs and Tories now exhibited itself in savage ferocity. Cornwallis moved northward, (Jan. 1,) to interpose between Greene and Morgan, who was operating against the British on the left side of Broad river. Tarleton was sent against him with one thousand light troops. Morgan awaited his approach at Cowpens, where Tarleton was defeated, with a loss of eight hundred killed and captured. Tarleton hastily joined Cornwallis, who advanced to intercept Morgan, before he should form a junction with Greene; but he was unsuccessful. The passage of the Catawba being forced by Cornwallis, Greene, retreating, pushed on for the Yadkin. He crossed in safety, and hastened on towards Guilford Court-House, and thence into Virginia. Meanwhile that state had been invaded by the traitor Arnold, while Wilmington, North Carolina, had been occupied by a body of the enemy from Charleston. At the approach of Cornwallis, the state authorities fled from Hillsboro' to Newbern; but that town was soon taken by a detachment of the enemy from Wilmington. North Carolina was, to all appearance, subdued. The Tories began to embody in force. To protect them, Cornwallis crossed the Haw, and encamped on the Alimance creek. Greene, reinforced, followed. The armies met near Guilford Court-House (Mar. 15,) where Greene was defeated; but at so great a cost was the victory gained, that Cornwallis was obliged to fall back on Fayetteville, (then Cross Creek,) and soon after still farther towards Wilmington. Adopting a bold policy, Greene marched hastily on into South Carolina, hoping either to draw Cornwallis from North Carolina, or to subdue Rawdon, who held South Carolina in subjection, if unsupported by the northern forces. On discovering the plan of Greene, Cornwallis, imitating his policy, advanced into Virginia, and joined the British force operating there. Greene's career in South Carolina was brilliant. Within seven months the British were confined to the district between the Cooper and the Ashley rivers. Henceforth North Carolina was no longer invaded. Troops were constantly raised by the state, however, till the close of the war. The Tories gave further trouble, but they were put down with some severity by Gen. Rutherford. Soon after the capture of Cornwallis, (October 17,) Wilmington was evacuated (Jan. 1782) by the British, while their troops were confined in South Carolina by the advance of Greene to Charleston Neck and the adjacent islands. Towards the end of the year peace was declared. Thus ended British domination at the south.

SUBSEQUENT HISTORY.—The history of North Carolina, since the Revolution, exhibits few changes and few events of more than ordinary importance. The materials on hand for preparing a sketch of this portion of its history

are meagre. A work on the subject, however, is announced as in course of preparation, by Francis L. Hawks, D.D., in which, no doubt, the history will be elaborately treated in all its principal aspects.—North Carolina acceded to the present Federal Constitution, Nov. 27, 1789, by a vote of 193 yeas to 75 nays. Since then, the people of no state have adhered more firmly to the Union. The state constitution was framed, as already noticed, in Dec., 1776. It was revised and partially modified in 1835. The governor is chosen by qualified voters for the House of Commons for the term of two years, and he can hold office only four years in six. He must be 35 years old, be worth \$5,000, and have been a resident for five years. The General Assembly is composed of a Senate of fifty members, and a House of Commons of 120 members. Members of the Senate are elected once in two years by the people, and must possess each 300 acres of land in the county for which they are chosen. Members of the House of Commons are also chosen by the people once in two years, and must hold each 100 acres of land in the county which they represent. The General Assembly meets once in two years at Raleigh, on the second Monday of November. By this body are appointed the Council of State, the Judges, and the Attorney-General; the former holding their offices during good behavior, the last for four years. Every white male citizen, being twenty-one years of age, or over, and a resident of the county one year, who has paid taxes, is entitled to vote for members of the House of Commons; to vote for Senators, he must, in addition, possess fifty acres of land.*

PHYSICAL CONDITION.—North Carolina presents a broad front to the ocean, but gradually contracts to the westward, till it ends in a narrow strip of land lying between Georgia and Tennessee. Its greatest length is 490 miles; its breadth varies in the eastern part from 120 to 180 miles; in the western, from 100 to 20 miles. The western boundary line, as determined by the act of cession of the western territory to the Union, (1790,) runs from the Virginia line along the top of Stone Mountain to the river Wataga; thence, in a direct course, to the top of Yellow Mountain; thence along that mountain, and the mountains Iron, Bald, Great Iron, and Unaka, to the southern boundary. The southern boundary line is quite irregular: begun in 1785, it was not established in its entire course until

1815. The line on the north has been already mentioned. The whole area included is 50,000 square miles.

NORTH CAROLINA.—GEOGRAPHY, TOPOGRAPHY, AND HYDROGRAPHY OF NORTH CAROLINA.—SOIL, PRODUCTS, RESOURCES, STATISTICS, POPULATION, TRADE, INTERNAL IMPROVEMENTS, EDUCATION, RELIGION, GEOLOGY, &c.—The entire coast of North Carolina is bordered by low, narrow beaches of sand, which are broken through at intervals, forming a communication between the ocean and the lakes, or lagoons, situate between the sandbanks and the main land. South of Cape Lookout these breaks are numerous, and the lagoons narrower; north of that cape the converse is the fact. Beyond the banks lie extensive shoals, all which, taken together, render the coast of this state more dangerous to navigators than any other on the Atlantic. Within the lagoons sand-bars are constantly forming, and as constantly changing their position. Furious gales, too, prevail; so that it is difficult even for a skilful pilot to conduct a vessel through the inlets, and over the lagoons, without the occurrence of some accident. Ocracoke Inlet is now the only navigable path north of Cape Lookout: it is full of shifting sand-bars, and, at low tide, even in the main channel, contains only six feet water. Roanoke Inlet, opposite the island of that name, is now obstructed; but measures for reopening it have been put into operation. To the northward, between the main land and the narrow beach, stretching down from Cape Henry, lies Currituck Sound, fifty miles long, by from two to ten in breadth. West of this, running some distance inland, is the Sound of Albemarle, sixty miles in length from east to west, and from five to fifteen broad. Its waters are fresh, and not subject to rise and fall from the influence of the tides, though they are affected by particular winds. These two sounds communicate with the sound of Pamlico, which lies south of Currituck, and is eighty-six miles long by from ten to twenty in breadth. Its depth in general is twenty feet, but shoals abound. It opens on the sea by means of Ocracoke Inlet, and is somewhat affected by the tides. Cape Hatteras forms the headland of the dangerous beach which separates Pamlico from the ocean, a beach so barren and desolate as to be inhabited only by fishermen and pilots.

For a distance of from sixty to eighty miles from the sea-coast the country is perfectly level, traversed by sluggish and muddy streams, and abounding in swamps and marshes. The soil is sandy and barren, except along the banks of the streams, where it is often fertile. The natural growth of this region is the pitch-pine, which attains a fuller development here than in the states further north, and yields vast quantities of tar, pitch,

* The constitution has in it something of the religious element; for it provides expressly that "no person who shall deny the being of a God, or the truth of the Christian religion, or the divine authority of the Old and New Testament, or who shall hold religious principles incompatible with the freedom or safety of the state," shall hold any civil office. On the other hand, it is also provided that no clergyman, while in the exercise of his duties, shall be a member of either branch of the assembly, or of the council.

turpentine and lumber. The swamps, so numerous in this section, are estimated to occupy about 3,000,000 acres of the 30,730,000 contained in the state. Of this land a considerable quantity may be drained or reclaimed by embankments, by which means it would become fitted for the production not only of rice, but also Indian corn, (maize,) cotton and tobacco. The Great Dismal Swamp, partly in this state and partly in Virginia, is thirty miles long and ten broad, extending over a surface of 150,000 acres. It is covered in some places with a dense forest of cedars, pines, and cypresses; in other places it is occupied by tall grasses and reeds, almost impervious. In the centre is Lake Drummond, twenty miles in circuit. The soil is covered knee deep with water: it is firm in some parts, but in most it consists of a soft yielding bog, into which a pole may be thrust for some distance. The swamp furnishes yearly a large supply of scantlings, which are borne out on log causeways to small receiving vessels that come up for their loads by means of canals. Similar in its character, and nearly as large, is Alligator, or Little Dismal Swamp, between the sounds of Albemarle and Pamlico; parts of which have been drained, and make valuable rice fields and wheat lands. There are other swamps further south (Oat-kill, Green, etc.) usually overgrown, like those spoken of, with cedar and cypress, intermingled with the maple, the poplar, the white oak, and having an impenetrable undergrowth of reeds, vines, briars, &c.

As we advance into the interior of the country, its aspect becomes more and more changed. "At a distance of sixty or seventy miles from the coast," says Williamson, "the land begins to rise into small hills, stones appear on the surface, and the streams ripple in their course. As we advance a little further westward, we find all the variety of hills and dales that may consist with a fertile country fit for cultivation." For about forty miles behind the flat country there extends, as far as the lower falls of the river, a belt of land, of a surface moderately uneven, with a sandy soil, of which pitch-pine is the prevailing natural production. West of the falls the surface is undulated, the streams flow more swiftly, and the land is more fertile, producing wheat, rye, barley, oats, flax, &c. Proceeding still further west, beyond the Yadkin and the Catawba, we reach an elevated region, forming part of the great table-land of the United States, and lying from 1,000 to 1,300 feet above the level of the sea. Above it tower the peaks of the Blue Ridge, the chief of which have distinct local appellations. Black Mountain, according to late measurements, has an elevation of 6,426 feet, being higher than any summit in the United States east of the Rocky Mountains, and 242

feet higher than the highest peaks of the celebrated White Mountains in New-Hampshire. Roan Mountain has an elevation of 6,088 feet, its summit forming a broad level meadow to which the horses of the vicinity are sent for pasturage. Grandfather Mountain is 5,550 feet high; Table Mountain attains the height of 3,430 feet. Mount Ararat, or the Pilot Mountain, in Surrey county, situated in a comparatively level region, exhibits a striking symmetry of structure. Its form is very nearly that of a cylinder. It is ascended by a path in some places nearly perpendicular; and the view from its summit is delightfully pleasing. Between these mountain ranges in the western part of the state the soil is productive.

North Carolina is well watered by considerable rivers; but these streams, in comparison with their size and number, afford few facilities for navigation. They are generally shallow near their mouths, or are broken by falls in the upper part of their course, or are choked up by bars, or are lost in shallow lagoons difficult of access. The principal river, whose course lies wholly within the state, is the Cape Fear. It is, moreover, the only large stream which flows directly into the ocean. Its principal tributaries are the Haw and the Deep, which join at Haywood, in Chatham county. It falls over the primary ledge into the low country at Aversboro. At Fayetteville it can be navigated by large boats. Above Wilmington it forms two branches, which reunite below that town, flowing in on a broad sluggish stream, obstructed by sand-bars, and difficult to navigate. By the aid of jetties, which diminish the breadth of the river, and by the stopping up of some of the smaller outlets, a greater velocity has been given to the current of the main channel, and the depth of the main channel, as far as Wilmington, made to reach from twelve to thirteen feet. Cape Fear has two entrances from the sea, separated by Smith's Island. The main entrance (the southwest) has from ten to fourteen and a half feet of water on the bar. The Chowan and the Roanoke flow into Albemarle Sound. The former is navigable to Murfreesboro; the latter for thirty miles, by small craft which ply on the sound. Both are navigable to a greater distance by boats: the Roanoke as far as Weldon. The Tar and the Neuse empty into the Sound of Pamlico. On the Tar, vessels drawing eight feet may go as high as Washington; boats as high as Tarboro. The Neuse is navigable by large boats as far as Kingston. The ocean entrances of both these rivers are channels, in which there is only ten feet water at high tide. The Waccamaw, the Lumber, the Yadkin, and the Catawba pass into South Carolina, where all but the first receive new appellations. From the west of the Blue Ridge flow New River, the Wataga, French Broad,

Little Tennessee and Hiwassee, the waters of all which mingle at length with those of the Ohio.

Professor Olmsted, in his report on the Geology of North Carolina, has given a full and reliable account of its minerals. The low country consists of deposits of sand and clay, similar and belonging to the same age (the tertiary) as those of Eastern Virginia and Maryland. These beds contain few minerals, but abound in deposits of shell, marl, fossiliferous limestone, copperas, and bog iron ore. A ledge of micaceous rocks, seen in the ravines and beds of rivers, forms the line which divides the low land from the upper country. A belt of mica slate, chlorite slate, gneiss and granite, lies west of this line. Among the minerals of this section are: hematitic iron ores, (Nash and Johnston counties,) plumbago, (Wake,) and occasionally soapstone and serpentine. This strip is succeeded by a belt of sandstone, running southwesterly from Granville across the state. Freestones and grindstones are abundant in some parts of the formation, which also contains argillaceous iron ore, and some coal measures, (Orange, Chatham.) Next to this is situated the great slate formation, about twenty miles in breadth, and running from northeast to southwest quite across the state. Within this district are found numerous beds of porphyry, soapstone, serpentine, greenstone, and bone or whetstone slate. The honestone is of a decidedly superior quality, being preferred by workmen to the best bones from Turkey. After the slate formation there comes next another belt of primary rocks, reaching nearly to the Blue Ridge. This comprises the gold region of North Carolina. Iron ore is found also in Rockingham, Stokes, Surrey and Lincoln. It is for the most part the magnetic oxide, and has been extensively wrought. There were in this section of the state, in 1830, three furnaces and thirty forges in operation.

PRODUCTIVE INDUSTRY AND RESOURCES.—Though it seems from the face of the map that this state is well watered by numerous streams, yet these rivers are, for reasons above stated, of little use in a commercial point of view. The agriculturist finds a difficulty in transporting his produce, which seriously interferes with his prosperity. The greater part of the produce from the high grounds in the eastern part of the state, (and some from the northern and middle,) is sent into Virginia; that from the western part, into South Carolina and Tennessee. This, too, is often done by means of tedious and cumbersome conveyances. The exports of the state at the period immediately preceding the revolution were at least double what they are at present. In 1849, they amounted to \$270,076, against imports to the value of \$113,146. The industry of North Carolina is almost wholly agricultural. There is not a

state in the Union more fortunate in its variety of staple productions. All kinds of grain that grow in the north are successfully cultivated here. The striking diversity of climate and soil between the low lands of the east, the high lands of the west, and the moderately diversified interior, has its correspondence in a similar diversity of agricultural productions. The low lands yield cotton, rice and indigo. The rice is of the best quality. The cotton crop is not large, not exceeding 30,000 bales yearly. Grapes, plums, blackberries, etc., grow spontaneously in this region; and the leaves of the canes in the bottoms, continuing green all winter, afford grateful food to herds of cattle. Further west, in the interior and in the valleys of the highlands, the soil is well adapted to wheat, tobacco, hemp, Indian corn, and the grains and fruits which flourish at the northward. The mountainous districts afford excellent pasture for large herds of cattle and horses.

In the elevated parts of the state the natural timber-growth is oak, walnut, cherry, and lime. The white-oak trees found here are well suited for making staves, being taller and more free from knots than those which belong further north. Thick and extensive forests of juniper and cypress are found in the eastern portion of the state, constituting a supply of timber for making shingles which is almost inexhaustible. The pine forests, which cover almost all the district, contribute greatly to the wealth and general prosperity of the state. They not only furnish quantities of lumber for exportation, but from them is obtained nearly all the resinous matter used in this country, particularly in ship-building, and also for other important purposes. These resinous products are turpentine, scrapings, spirits of turpentine, rosin, tar, and pitch. Turpentine is the mere sap of the pine tree. It is obtained by making an incision in the bark, from which the turpentine flows, dropping into a box beneath. Incisions are made usually about the middle of March, and the dropping ceases about the end of October. The boxes are emptied five or six times a year. A barrel of turpentine is the produce of about forty trees. The same trees will yield about one third that amount of scrapings, which is that part of the sap which becomes hard before reaching the box. Spirits of turpentine is made by distilling this sap the residuum after distillation is rosin. About 600,000 barrels of turpentine are now made within the state, the greater part of which is distilled within its limits. Its production gives direct employment to four or five thousand laborers; and ten or fifteen thousand more, it is computed, are supported by the proceeds of its first sale. No other article, it is said, produced by the same number of laborers, contributes so much to the commerce and prosperity of the state. Tar is made

from billets of pine, burned in pits, under a heavy covering of turf or earth. The billets are consumed slowly without flame; and the tar, as it exudes, is conveyed by a trench into a cavity made in the ground as a reservoir. The tar of Carolina is of much inferior quality to that of the north of Europe, chiefly on account of the slovenly manner in which the former is usually prepared. The kila is most frequently built on light, sandy land, in which are cut both the trench and the reservoir. In consequence, the product of the burning always contains a large percentage of sand, a pint of which will condemn a gallon of tar. More stringent inspection laws have been enacted of late years, from the faithful execution of which a great improvement in Carolina tar must result. Pitch is obtained from tar by boiling it down to dryness.

This state, both on account of its natural productions and its numerous water-courses, is admirably adapted to manufactures. Yet manufactures chiefly exist in the shape of household industry. During the last few years, however, several cotton and wool manufactories have been erected, which are now in active operation. Gold is an important product of North Carolina. The region where it is mainly found has been already designated. This district is, for the most part, barren, and its inhabitants generally poor and ignorant. The principal mines are Anson's, Read's, and Parker's. The first named is situated in Anson county. Its yield was once good; but, disputes arising as to the title of part of the land, operations have been much retarded. Read's mine is in Cabarras, and was the first wrought. Masses of metal, weighing 400, 500, or 600 penny-weights, are occasionally dug up. One piece was found by a negro, weighing, in its crude state, twenty-eight pounds avoirdupois. Marvellous stories used to be told of this lump; as, that "it had been seen by gold hunters at night, reflecting so brilliant a light when they drew near to it with torches, as to terrify them, and deter them from further examination." Parker's mine is situated on a small stream four miles south of the Yadkin. The metal is found chiefly in flakes and grains. A mass, however, weighing four pounds and eleven ounces, has been discovered. In the mining districts, gold contained in goose quills forms a currency. Its value is fixed by weight. The larger part of the produce of the mines is bought up by dealers, at from ninety to ninety-one cents a penny-weight. By these it is carried for the most part out of the state. They sell some to jewellers; some is deposited in banks; and a large quantity is received at the mint of the United States.

Statistics of the productive industry and resources of North Carolina cannot easily be procured. The latest we have at command are given in the official returns for 1840.

From these we take the subjoined summary: In 1840, the value of home-made or family manufactures was \$1,413,242; there were three woollen manufactories and one fulling mill, producing articles to the value of \$3,900, with a capital of \$9,800; twenty-five cotton manufactories, with 47,934 spindles, employing 1,219 persons, producing articles to the value of \$438,900, with a capital of \$995,300; there were eight furnaces, producing 968 tons of cast iron, and forty-three forges, etc., producing 968 tons of bar iron, employing 468 persons, and a capital of \$94,961; two smelting-houses, employing 30 persons, and producing 10,000 pounds of lead; ten smelting houses employing 389 persons, and producing gold to the value of \$255,618, with a capital of \$9,832; two paper-mills, producing articles to the value of \$8,785, with a capital of \$5,000; hats and caps were manufactured to the value of \$38,167, and straw-bonnets to the value of \$1,700, employing 142 persons, and a capital of \$13,141; 353 tanneries, employing 646 persons, with a capital of \$271,979; 238 other leather manufactories, as saddleries, etc., producing articles to the value of \$185,387, with a capital of \$76,163; sixteen potteries, employing 21 persons, producing articles to the value of \$6,260, with a capital of \$1,531; 89 persons manufactured machinery to the value of \$43,285; 48 persons manufactured hardware and cutlery to the value of \$1,200; 698 persons manufactured carriages and wagons to the value of \$301,601, with a capital of \$173,318; 323 flouring-mills produced 87,641 barrels of flour, with other mills employing 1,830 persons, producing articles to the value of \$1,552,096, employing a capital of \$1,670,228; vessels were built to the value of \$62,800; 223 persons manufactured furniture to the value of \$35,002, with a capital of \$57,980; 40 persons manufactured 1,085 small arms; 15 persons manufactured granite and marble to the value of \$1,083; 276 persons produced bricks and lime to the value of \$58,336; 367 persons manufactured 1,612,825 lbs. of soap, 148,546 lbs. of tallow-candles, 335 lbs. of spermaceti and wax candles, with a capital of \$4,754; 2,802 distilleries produced 1,051,979 gallons, and with breweries, which produced 17,431 gallons, employed 1,422 persons, and a capital of \$180,200; 38 brick or stone, and 1,822 wooden houses, employed 1,707 persons, at a cost of \$410,264; twenty-six printing offices, four binderies, twenty-six weekly and one semi-weekly newspaper, and two periodicals, employed 103 persons, and a capital of \$55,400. The whole amount of capital employed in manufactures was \$3,338,900.

As regards live stock and agricultural products, the same authority has the following: In 1840, there were in the state 168,608 horses and mules; 617,371 neat cattle; 538,279 sheep; 1,649,716 swine; poultry to the

value of \$544,125. There were produced 1,960,885 bushels of wheat; 3,574 bushels of barley; 3,193,941 bushels of oats; 213,971 bushels of rye; 15,391 bushels of buckwheat; 23,893,763 bushels of Indian corn; 625,044 lbs. of wool; 1,063 lbs. of hops; 118,923 lbs. of wax; 2,609,239 bushels of potatoes; 101,269 tons of hay; 9,879 tons of hemp and flax; 16,772,859 lbs. of tobacco; 2,820,388 lbs. of rice; 51,926,190 lbs. of cotton; 3,014 lbs. of silk cocoons; 7,163 lbs. of sugar; the products of the dairy were valued at \$674,349; of the orchard, at \$386,006; of lumber, at \$506,766. There were made 28,752 gallons of wine.*

* A citizen of North Carolina, who evidently writes intelligently, communicates the following pertinent notice of the commerce and resources of the state, to the *Merchant's Magazine*, for September, 1849, (Vol. xii. pp. 356, 359.)

"There is no state in the Union whose statistics are so meagre; none in which the difficulty of procuring information necessary to the proper exhibition of the commerce and resources are greater. With a coast bound with sand-bars, the navigation of rivers obstructed by nature, a large extent of territory with diversified interests, with natural obstructions to the concentration of our commerce, with no emporium to concentrate talent, and to give unity of design to enterprise, our commerce, like the rains falling on the lofty summits of our mountains, runs off in every direction to swell each neighboring rivulet, without the possibility of ever uniting again to form a great, grand, and noble current of its own. A large portion of western and southwestern North Carolina finds a market in Columbia and Charleston, South Carolina; the northern, and a portion of the eastern and middle in Richmond, Petersburg, and Norfolk, Virginia, and the productions of these sections go to swell the tabular exhibition of the afreight states, and are unknown as the products of our own state.

"Our legislatures and members of Congress have hitherto manifested but little interest in the exhibition of our commerce and resources. With the exception of a single effort made a great many years ago, we have no general survey of the state. The exploration of our mineral wealth has been left to chance and individual enterprise, with the limited knowledge we have of the mines confined to their immediate localities, and for the most part, to those who are practically engaged in them. No southern state can compare with ours in mineral wealth and resources for manufacturing. Our forests will supply any possible demand for timber and fuel; we have coal in the greatest abundance, enough to supply the entire demand of our entire country; and which, for a tenth of the cost incurred by the state of Maryland, might be rendered available to the entire coast of the Atlantic shore.

"Information on our commerce will have to be procured, not only from our little ports, but from those points in South Carolina and Virginia which draw thither so large a share of our products. If you should not get an article sooner, perhaps I may furnish you one, or a series of them, in the early part of the year 1851. I postpone until that time, with the hope of collecting information from, or through the next Legislature of our state; from the members of the next Congress, through the various reports of that body; from the next census; and from such private sources as I may be able to command. An article based on the lights now before me would be conjectural and uncertain in a high degree. The last census is a libel on our state. If you have the prospect of an article from any other source, do not rely on me. The undertaking, properly executed, is difficult, laborious, and expensive.

POPULATION.—The causes which retarded the increase of the population of North Carolina, in the early part of its existence as a colony, have been adduced in the historical portion of this article. The first impulse in the way of increase was imparted about the middle of the last century, when the Scotch Presbyterians from the north of Ireland, and the Scotch Highlanders from Argyleshire, migrated into the country, and when the Moravians made settlements at Salem, Bethany, and Bethabara, between the upper Yadkin and the Dan. In 1876, as we have seen, the whole number of taxable inhabitants was about 1,400; in 1717, about 2,000; of these, at both periods, about one third were negro and Indian slaves. At the time the state ceased to be a royal government, the population is supposed to have been little more than 150,000, of whom one fifth were slaves. Edenton, Newbern, and Wilmington were the only towns worthy of being so called in the province; and of these three, Newbern, the most populous, did not contain more than six hundred inhabitants.

POPULATION AT DIFFERENT PERIODS.

Date.	Whites.	Slaves.	Free Col'd.	Colored.	Total.
1790.....	788,304	100,572	4,975	105,547	363,751
1800.....	837,764	133,296	7,043	140,389	478,103
1810.....	376,410	108,594	10,266	179,080	555,669
1820.....	419,300	905,017	14,612	219,699	638,629
1830.....	472,843	945,601	19,548	265,144	737,957
1840.....	484,870	945,817	21,731	267,548	753,419
1850.....	552,477	266,412	27,271	315,688	862,168

"Every thing indicates that a better day is coming; our navigation, and other means of internal transportation have the prospect of improvement and extension; our agricultural, mining, and manufacturing interests have received of late quite a new impetus.

"Some few years since I made a tour of the southern states; and I can with the utmost confidence say that none of them excelled North Carolina in natural fertility of soil. This I know will sound strange to those abroad, who have heard only of our pine-forests, and cypress and juniper swamps. The swamp country, which is equal to the prairies of the west, covering a large portion of the eastern section of the state, can be reclaimed; much has already been reclaimed. The uplands and mountain sections are like those of Virginia and Pennsylvania. Unfortunately our thoroughfares have given character to the soil of the state. They generally run through the pine sections, because there they could be constructed at less cost, of better material, and traverse the state at a shorter distance. If the Great Central Railroad is constructed, for which the prospect is quite fair, with the coordinate branches, it will be to North Carolina what 'Clinton's Ditch' has been to New-York. More than half of our state is dependent on the old four-horse wagon system for transportation over a distance of from fifty to three or four hundred miles to find a market. Obstructions exist in all our rivers, at the beginning of the granite country, as you ascend from the sea-board. If you commence at Weldon, on the Roanoke, in Halifax county, running to Smithfield, in Johnston county, to Fayetteville, and from thence to Wadesboro', in Anson county, you will get pretty nearly the line of obstruction. Many of our streams, after passing the rapids and falls which occur chiefly at the place designated, become navigable for a considerable distance. The line designated will give the country dependent on wagons."

Of this population there were employed in agriculture, 217,095; in commerce, 1,734; in manufactures and trade, 14,822; in navigating the ocean, 327; in sailing on canals, rivers, &c., 379; and 1,086 in the learned professions. The amount of population has been greatly diminished during the last fifty years, by the drain of emigration, first to Kentucky and Tennessee, and lately to the states of the southwest.

CHIEF TOWNS.—The state is divided into sixty-eight counties, of which Lincoln (population 25,160) is the most populous. There are no large towns, and no good seaports in this state. Raleigh, named after the renowned Sir Walter, in honor of his attempts to colonize what is now North Carolina, has been, since 1792, the capital of the state. It is situated within a few miles of the Neuse, 123 miles from Newbern, in a healthy, elevated situation. In 1840, it contained a population of 2,240. The former state-house, in which was a marble statue of Washington, in Roman military costume, by Canova, was destroyed in 1831, by fire. The new edifice is superbly built of granite, is 186 feet long by 90 feet wide, and is surrounded by massive granite columns. Near the state-house stands the institution, just erected, for the instruction of the deaf and dumb. In the northeastern part of the state, Edenton, on the Chowan, (population 1,500,) Elizabeth, on the Pasquotank, Plymouth, (population 800,) and Halifax, on the Roanoke, are the chief villages. Washington and Tarboro, on the Tar, contain each about 1,000 inhabitants. Newbern, founded by Germans in 1709, is situated on the Neuse, at the confluence of the Trent, 80 miles from Pamlico Sound, and until a few years since, was the largest town in the state, containing, in 1840, 3,690 inhabitants. It was once the capital of the state, and is possessed of considerable trade. The approach from sea is by Ocracoke Inlet. Beaufort, on Newport river, a few miles from the sea, has a population (1840) of 1,100; and its harbor is the best in the state. Steamboats go up from Beaufort, by inland channels, into Albemarle Sound. On Cape Fear river are situated the thriving towns of Wilmington and Fayetteville. The former, distant about 80 miles from the sea, is the most important commercial town in North Carolina. Its population, in 1840, was 4,744. Vessels of 300 tons can enter the river and ascend to the town, but the entrance is dangerous. An active coasting trade is carried on from the port, and it has direct foreign commerce with the West Indies and England. In 1840, the shipping was 18,232 tons. The railroad between Wilmington and Weldon, on the Roanoke, has given a new impulse to the trade of both places. Fayetteville is a flourishing town, at the head of boat navigation. In 1840, its population was 4,285. It contains three

churches, a court-house, two banks, and a United States arsenal of construction. It had, in 1840, 52 stores, with a capital of \$372,400; and a capital of \$384,000 invested in manufactures. In the west, the chief towns are Salem, Salisbury, and Charlotte. The population of Salisbury is about 2,000. Near it are the "Natural Walls of Rowan," or trap dykes, for a long time supposed to be artificial constructions, the origin and purpose of which gave rise to various absurd conjectures.* Charlotte, of late years much increased in population on account of its nearness to the gold washings, contains over 2,000 inhabitants, and a mint erected by the federal government for coining gold. There are mineral springs in the state: the Rockingham, in the county of that name; the Catawba, in Lincoln, containing magnesia and sulphate of lime; and the Warm, in Buncombe, the temperature of which is from 96° to 100°.

EDUCATION.—Before the revolution, literature was hardly known, much less a subject of cultivation. There were in the province, at the end of the royal government, only two schools in operation, one at Newbern, and one at Edenton. The trustees had been only of late incorporated, by whom, in Newbern, a wooden building had been erected, in which the meetings of the lower house of the Legislature were occasionally held. The constitution of 1776 directed "that a school, or schools, shall be established by the Legislature for the convenient instruction of youth, with such salaries to the masters, paid by the public, as may enable them to instruct at low prices; and all useful learning shall be duly encouraged and promoted in one or more universities." Till within late years, however, no system of free schools was introduced throughout the state. Liberal provision was made for the purpose in 1825, by the creation of a school fund. This fund amounted, in 1836, to \$242,046, besides the income of stock held by the state in several railroads, the proceeds of the sale of swamp lands, and the tract acquired from the Cherokees in the southwest of the state. In order to apply these proceeds to their intended object, a Board of Literature was directed, in 1837, to devise a plan of common schools, suited to the exigencies and resources of the state, and to report the same at the next session of the General Assembly. What and how important further steps were taken in the matter, we have not at hand the means of ascertaining. The University of North Carolina, established in 1791, is situated at Chapel Hill, Orange county, 27 miles west northwest of Raleigh. It has six professors, and over 100 students. Davidson College, founded in 1837, is in Mecklenburg county. In 1840, there were

* See Williamson's Hist. of North Carolina, vol. ii. pp. 174-178, note, who considers them artificial.

in the state 141 academies, with 4,398 students; 632 common and primary schools, with 14,937 scholars. At the same period there were living in the state 56,609 white persons, over 20 years old, who could neither read nor write.

RELIGIOUS SECTS.—At the breaking out of the revolution, religion was at a low ebb in the province. The law provided expressly for the maintenance of one clergyman of the Established Church in each parish; yet there were at that time not more than six in the entire province. There were about the same number of Presbyterian ministers. The Quakers had some strength in the northeastern part of the province; and the Moravians had about 500 in all in the churches of their six settlements. Other Christians had no regular establishments; though the counties were visited by itinerant preachers of the Methodist and the Baptist persuasions. At present these two denominations have the most numerous church-membership in the state, each reckoning more than 20,000 communicants. The Presbyterians, who are most numerous in the western part of the state, had, in 1840, 11,000 communicants. At the same time, the Episcopalians had a bishop and about 20 ministers; the Lutherans, 18 ministers, 38 churches, and 1,886 members. Besides these, there are in the state some Moravians, Quakers, and Roman Catholics.

CANALS AND RAILROADS.—Not much has yet been done in North Carolina towards in-

creasing facilities for transportation. The country is well adapted to canalization. The Dismal Swamp Canal lies partly, and the Northwest Canal, a branch of that work, wholly, within the limits of the state. Much of the northeastern trade takes the latter channel. Harlow Canal, a short work, extends from the Neuse to the harbor of Beaufort. Three Virginia railroads, which have their southern termini in the north of North Carolina, divert much of the trade of the northern counties to the markets of Virginia. The state has two railroads within its own limits. The one extends from Raleigh to Gaston, in Halifax county, on the Roanoke, a distance of 87 miles. Its cost was \$1,600,000. The other runs from Wilmington to Weldon, a few miles from Gaston, a distance of 162 miles. It cost \$1,800,000. A line of steamers from Wilmington to Charleston, (S. C.) 150 miles, is connected with this route, which thus forms one link in the great chain of communication, extending from Maine to Georgia. Other railroads are projected, chiefly for the central and western portions of the state.

BANKS.—There were in North Carolina, in 1846, 18 banks, with a capital of \$8,225,000, and a circulation of \$2,954,578. Of these, the deposits amounted to \$639,507; specie, \$1,261,061; real estate, \$117,000; other assets, \$1,114,102; loans and discounts, \$4,688,514; due to other banks and other liabilities, \$77,631.

BANKS IN NORTH CAROLINA, MARCH, 1861.

Location.	Name of Bank	President	Cashier	Capital
Ashville.....	Bank of Cape Fear.....		J. F. E. Hardy.....	\$150,000
Charlotte.....	Bank of State N. C.....	John Irwin.....	William A. Lucas.....	125,000
Elizabeth City.....	".....	William B. Shepard.....	John C. Ehringhaus.....	100,000
Fayetteville.....	".....	Charles P. Mallett.....	Ichabod Wetmore.....	150,000
".....	Bank of Cape Fear.....	Charles T. Haigh.....	John W. Wright.....	350,000
".....	Bank of Fayetteville.....	John D. Starr.....	William G. Broadfoot.....	300,000
Milton.....	Bank of State N. C.....	Samuel Watkins.....	William B. Hill.....	125,000
Morgantown.....	".....	Robert C. Pearson.....	Isaac T. Avery.....	100,000
Newbern.....	".....	George S. Attmore.....	John M. Roberts.....	150,000
".....	Merchants' Bank.....	Charles Slover.....	William W. Clark.....	225,000
Raleigh.....	Bank of State N. C.....	George W. Mordecai.....	Charles Dewey.....	300,000
".....	Bank of Cape Fear.....		William H. Jones.....	150,000
Salem.....	".....		Israel G. Lash.....	150,000
Salisbury.....	".....	M. Chambers.....	Dolphin A. Davis.....	175,000
Tarboro.....	Bank of State N. C.....	James Weddell.....	Peter P. Lawrence.....	150,000
Washington.....	Bank of Cape Fear.....	John Myers.....	Benjamin Runyon.....	175,000
Wilmington.....	".....	Thomas H. Wright.....	Henry R. Savage.....	400,000
".....	Bank of State N. C.....	Edward P. Hall.....	William E. Anderson.....	300,000
".....	Commercial Bank.....	Oscar G. Parsley.....	Timothy Savage.....	200,000

Total, 19 Banks—Circulation, \$2,500,000—Specie, \$1,600,000—Capital, \$3,650,000

[*Banks' Magazine.*]

COURTS.—The Supreme Court holds three sessions each year, two at Raleigh, and one at Morgantown, for the western part of the state. It continues to sit till all the business on the docket is concluded, or continued to another term. It determines all cases in law and equity, brought before it by appeal, or by the parties. It has original and exclusive jurisdiction in repealing letters-patent. The Su-

preme Court for the year 1851 is composed of Thomas Ruffin, Chief Justice, with a salary of \$2,500; Frederic Nash and Richard M. Pearson, Associate Justices, \$2,500; B. F. Moore, Attorney-General; James Iredell, Reporter, \$300; Edward B. Freeman, clerk at Raleigh; James R. Dodge, clerk at Morgantown. The Superior Courts of Law, and the Courts of Equity, are held twice a year in

every county of the state. There are seven circuits, of about ten counties each, which the judges ride alternately, but never visiting the same circuit twice in succession. These judges have complete equity jurisdiction. The salary of each is \$1,960. The judges now on the bench are, Thomas Settle, of Rockingham; John M. Dick, Greensboro; D. F. Caldwell and John W. Ellis, Salisbury; John L. Bailey, Hillsboro; M. E. Manly, Newbern; W. H. Battle, Chapel Hill; W. H. N. Smith, Murfreesboro; John S. Hawke, Washington; B. F. Moore, Halifax county; John F. Poindeexter, Fayetteville; Thomas S. Ash, Orange county; Daniel Cole, Concord; B. S. Gaither, Asheville. B. F. Moore, of Halifax county, is Attorney-General.

OFFICERS OF GOVERNMENT.—The government for the present year consists of David S. Reid, Governor, (term of office from January 1, 1851, to January 1, 1853,) a furnished house, and \$2,000 salary; William Hill, of Raleigh, Secretary of State, \$800 and fees; Charles L. Hinton, of Wake county, Treasurer, \$1,500 salary; Stephen Birdsell, of Raleigh, Clerk of the Treasury Department, \$500 salary; William F. Collins, of Chatham county, Comptroller, \$1,000 salary; Andrew Joyner, of Halifax county, Speaker of the Senate; Robert B. Gilliam, of Granville co., Speaker of the House of Commons.

Council of State.—The council is composed of seven members, each of whom receives \$3 a day while in service, and \$3 for every thirty miles of travel. The members are Lewis Bond, of Bertie county; Joshua Taylor, of Beaufort; N. T. Green, of Warren; Charles L. Paine, of Davidson county; John Winslow, of Cumberland county; Thomas A. Allison, of Iredell county; and Adolphus L. Erwin, of McDowell county.

Finances.

Receipts from Nov. 1, 1846, to	
October 31, 1847.....	\$251,717 65
Expenditure for the same period.	175,402 61

Excess of Receipts.....	\$76,315 04
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State Debt.—This is contingent, and arises from endorsements, by the state, of bonds of railroad companies to the amount of \$1,100,000. From this is to be deducted \$13,000 for bonds not used, and \$110,000 for bonds paid; which reduces the amount for which the state is liable to \$977,000.

RESOURCES AND PROSPECTS OF NORTH CAROLINA, AND HER MINERAL FORMATIONS.—From the speech of the Hon. T. L. Clingman, delivered in the Congress of the United States, which he has kindly furnished us, we make some interesting extracts in regard to the industry, &c., of North Carolina, and append to them a lecture upon the coal formation of the same state, delivered last winter before

the Legislature at Raleigh, by Lemuel Williams, Esq.:

"I would direct your attention to North Carolina, because I know more about her and what she contains. I must first, however, make a passing remark with reference to coal and iron, lest it should be supposed that I am indifferent to the interests of Pennsylvania, because my own state has not similar advantages. Iron ore is not only generally and abundantly diffused throughout the state, but she has also two large deposits of coal. The fields of this mineral, too, are fortunately deposited on the two rivers most easily rendered navigable of any in the state, and emptying into the ocean within her own limits. The existence of the coal on Deep River has been known for half a century, but until recently it was not supposed that it could be transported with facility to the markets of the world. The operations, however, of the Cape Fear and Deep River Navigation Company, have within the last twelve months rendered it certain that this coal can easily and cheaply be transported to the ocean. The field is extensive, and cannot be exhausted for centuries. It contains in abundance the best varieties of highly bituminous, semi-bituminous, and anthracite coal. Capitalists from Massachusetts and New-York, who have recently acquired interests in the mines, assure me with the utmost confidence, that they will be able to mine this coal, and transport it to tide water, at a cost of less than \$1 per ton. It costs more than \$3 per ton to transport the coals of Maryland and Pennsylvania to the sea. The stream, with the locks already nearly completed, is capable of conveying in steamboats several millions of tons annually. We expect, therefore, to be able to supply with the best kind of coal the cities of the Atlantic coast, and the steamers of the ocean. There are, also, in some places, lying immediately above the coal, large deposits of rich iron ore. In the production of iron, either free or slave labor can be obtained at forty to fifty cents per day. This labor, when employed in raising coal and iron ore in the vicinity of Pittsburg, in Alleghany county, costs not less than \$1 per day. Provisions also are abundant and cheap. When, therefore, in the case above stated, the labor employed in making a ton of iron in Pennsylvania costs \$45, the same would cost with us only \$23 50. We might, therefore, when the Pennsylvanians were doing nothing, realize a profit of \$23 per ton.

"I do not, however, regard the calculations of the gentleman from Pennsylvania as entirely accurate. Still I have no doubt that we should be able to produce iron cheaper than they are doing in his state. The iron, too, when thus made, could be transported to the ocean for less than \$1 per ton. It is obvious, therefore, that our state might put forward a

demand for high protective duties, with as much show of justice as Pennsylvania does. I trust, however, that her people will be satisfied with the existing rates, highly protective as they are. North Carolina has, also, not less than fifty cotton factories, most of which have been built within the last four or five years. I think she is in advance of any of the southern states in this branch of business. Whether I am right or not in entertaining this opinion, the returns of the late census, when completed, will decide. It is believed by many that the south cannot compete successfully with the north in manufacturing, it being supposed that we have not the capital to spare for such investments. Let us look for a moment at the elements of manufacturing capital. An important one is water-power, and North Carolina has more than enough of this to move all the machinery now existing in the world. It may be bad, too, in most of the localities at a price merely nominal. Timber, stone, and all building materials, are also equally cheap. North Carolina, though not a great cotton state, also produces five times as much, probably, as she or any one southern state is now manufacturing. She can, too, obtain easily an additional supply from South Carolina, by means of three railroads connecting her with that state. The cotton now produced by her is cheaper, probably, by one cent in the pound, than the same article at Charleston. It is also cheaper at Charleston, by three fourths of a cent, than in New-England. Our manufacturing establishments, therefore, can obtain the raw material at nearly two cents on the pound cheaper than the New-England establishments. Provisions are also only half as dear with us. Labor is likewise one hundred per cent. cheaper. In the upper parts of the state, the labor of either a free man or a slave, including board, clothing, &c., can be obtained for from \$110 to \$120 per annum. It will cost at least twice that sum in New-England.

"The difference in the cost of female labor, whether free or slave, is even greater. As we have now a population of nearly one million, we might advance to a great extent in manufacturing before we materially increased the wages of labor. We have, therefore, all the elements of manufacturing capital much cheaper than the north, except the machinery, and this we should be able to obtain at the same price. There is a sufficient surplus capital among us for its purchase. Two years since, our Legislature imposed a tax on money placed at interest, whenever the individual had more than \$1,000 above his own indebtedness. It appeared that there were more than \$15,000,000 so lent. If, as I think it is probably true, that there is as much now outstanding in smaller sums, there is not less than thirty millions of capital in this condition. Much of this sum might at once

be invested in manufacturing. The other southern states are doubtless in a similar condition. Our southerners have abundance of money to expend for purposes of business or pleasure. We shall, therefore, I think, at no distant day, work up a large, if not the greater portion, of our cotton into manufactured fabrics. Should this opinion of mine be well founded, it is obvious that no duties which we could impose would long enable the New-England factories to sustain themselves in competition with us. They would find it to their interest to go into such fine fabrics as we would not produce for some time to come, or into new employments. I have no apprehension that a people so intelligent, energetic, and enterprising as they are, will fail to find means of sustaining themselves in comfort and prosperity."

"COAL OF NORTH CAROLINA.—The value of coal as a mineral fuel is but little known, except to those whose interests have made it a subject of study. Professor Taylor, in his invaluable work on the statistics of coal, very justly remarks, that it would be no difficult task to show, in figures, how vastly more profitable is the application of labor in the mining, and working, and transportation of coal, than that of the precious metals. The annual production of all the gold and silver mines of North and South America was estimated by Baron Humboldt at nine millions of pounds sterling, and at present (excepting the recent discoveries in California) is less than five millions of pounds, or twenty-five millions of dollars. Now, the value of the coal produced annually, in Great Britain alone, is computed at fifty millions of dollars at the pit's mouth, and from seventy-five to one hundred millions of dollars at the places of consumption.

"Great Britain is indebted to her coal for her supremacy as a manufacturing, commercial and maritime nation. Take from her the coal mines, and she would sink into a fourth-rate commercial and maritime power. Her manufactures would cease—her Sheffield, Birmingham and Manchester would be no more, and her people would be compelled to emigrate, or starve.

"The use of coal in the United States, to any considerable extent, has been very recent. The immense coal fields west of the Alleghanies were considered of little value twenty-five years ago, and the anthracites of Pennsylvania were scarcely known thirty years since. The whole amount of that kind of fuel mined in Pennsylvania in 1820, was only 865 tons. The mining of that species of coal increased very slowly, as it had to make its way against public prejudice, arising from its difficulty of ignition.

"In 1828, the amount of anthracite mined and sent to market was only seventy-seven thousand tons. From that period the quantity

rapidly increased, and in 1849 amounted to nearly three millions and a half of tons. In 1860, it is estimated that the amount did not fall short of four millions of tons. The beneficial effects resulting to the state of Pennsylvania from the development of her coal fields was felt and acknowledged throughout the length and breadth of her land. The growth of commerce increased with the growth and development of her mineral resources. In 1820, the coastwise arrivals at the port of Philadelphia amounted to only 877; in 1847, to 18,069. Three millions of tons of anthracite coal were brought to market that year, whose value then was twelve millions of dollars, and eleven thousand four hundred and thirty-nine vessels cleared from the single port of Philadelphia that season, loaded with a million and a quarter tons of coal.

"During the agitation of the tariff in 1846, at Washington, it was stated by Mr. Cameron of Pennsylvania, that thirty years ago coal was entirely unknown in this country; yet in 1846 it gave employment to four millions of days' work annually. It kept in movement a thousand ships of one hundred tons each, and afforded a nursery for the training of six thousand seamen, who earned three millions of dollars yearly. It gave circulation to a capital of fifty millions of dollars. It kept in activity fifteen thousand miners, and sustained a mining population of fifty thousand souls, who annually consumed upwards of two millions worth of agricultural production, and more than three and a half millions of dollars worth of merchandise.

"To Pennsylvania (says Professor Taylor) the almost exclusive possession of this species of combustible (anthracite) within reasonable distance of the sea-board, is a boon of inestimable price, which places her in a position of enviable superiority, and baffles speculation as to the point to which it may ultimately elevate her. If such, then, have been the magnificent results, from the development of the coal fields of Great Britain and Pennsylvania, and such the anticipations as to the future, the question occurs, what is the value of the coal fields of North Carolina?

"Their value depends upon their extent, upon the thickness of the beds, the quality of the coal, and the facilities and cheapness of transportation to tide-water, and thence to a market. Professor Johnson has recently returned from a tour of several weeks' examination in the valley of Deep River. He stated that his own observations satisfied him that the coal measures of Deep River extended fifteen miles, and that he had reliable authority for their extension fifteen miles farther. He did not state the width of the measures, as he had not time to examine, except in one place where he had traced the beds on both sides of the river, and where they were from three and a half to four miles

wide. From other sources of information I have no doubt of their greater extension, both in length and width. But, if we take the length to be but thirty miles, and the mean width at three and a half miles, we have an area of one hundred and five square miles.

"The thickness of several of the veins the learned professor stated; none that he examined were less than six feet. Some were of greater thickness, and, in some localities, two or three veins were found underlying each other. Now, if we estimate the area to be underlain with only one vein, and that vein to be only six feet thick, this estimate would give for the solid cubic quantity in the ground six millions of tons to the square mile. Making allowance of one fifth for waste and faults, the whole available amount would be five millions of tons to the square mile, or five hundred and twenty-five millions of tons for the entire coal area of Deep River. The coal is of three kinds, the highly bituminous, the semi-bituminous, and the pure anthracite, and each kind has been shown by analysis to be among the best coal of its class. In quality of coals the fields of Deep River are unsurpassed; in variety, unequalled by any location in the United States; in quantity, as far as regards all practical purposes, equal to any other. To mine the coal of Deep River at the rate of two millions of tons per year would occupy 262 years, and at the rate of three millions of tons a year, 175 years. The remaining question is, what are the means and cost of transportation to market? The means of transportation are through the slack-water improvement of Cape Fear and Deep rivers. The enterprise of a few individuals, aided by the liberality and wisdom of your Legislature, has opened a pathway to the ocean, which, for extent and capacity combined, surpasses any canal in this or any other country, and at an expense not exceeding four hundred thousand dollars. Compare the canal, as it may without impropriety be called, with the great canals which have been constructed with the view to benefit the coal trade of Maryland and Pennsylvania. The cost of the Chesapeake and Ohio Canal was upwards of seventeen millions of dollars. It is about the extent of the Cape Fear and Deep rivers—is 60 feet wide, and 6 feet deep, with locks of 16 feet in width, and one 100 feet long. Your canal averages 450 feet in width. The water in the pools is usually from 10 to 15 feet in depth. The locks are 18 feet wide and 150 feet in length. It requires 14 days to go from Cumberland, at the head of the Chesapeake and Ohio Canal, to Alexandria and return, not including the time occupied in loading and unloading the barges. A steamboat, with her tow of barges, can go from the mines on Deep River to Wilmington, and return, in four days—making a difference of ten days in one trip.

* The expenses of transportation are greater in other respects, as well as in the saving of time, as it regards these two improvements. On the Maryland Canal, animal power is used to draw the coal barges. On the Cape Fear and Deep River improvements, steam-power will be used. From the relative cost of the two improvements, and the means of transportation to be used on them, there can be scarcely a comparison, as to the relative amount of toll, or the expenses of transportation. When at tide-water, at Wilmington, the coal can be sent to New-York at as little expense as from Alexandria. As far, then, as regards bituminous coals, the owners of mines on Deep River need not fear any rivalry from the Maryland mines, or from any other quarter. Nor need the owners of the Maryland mines fear any rivalry from North Carolina. The supply from both, and from all sources within our own borders, will not exceed the demand for that species of fuel, when we take into consideration the rapidly increasing number of river and ocean steamers.

"The case stands somewhat different as it regards the anthracite coals. This species of coal is supposed to constitute the great bulk of the coals on Deep River. The market for this coal is not to the south, but to New-York, and the New-England states. To enable the mine owners on Deep River to compete with the anthracites of Pennsylvania, (which are all the anthracites of any amount in the United States,) they must be able to place their coal at New-York at as low a price as the anthracites of Pennsylvania. It is a saying in England, when a person sends his goods to a market which produces an abundance of goods of a similar character, that he has 'sent his coals to Newcastle,' which, as you know, is the chief mart of the great mining district of England. Pennsylvania is the great mining region of the Atlantic states, the Newcastle of America, and New-York is contiguous to her. Their territories join.

"Their capitals are less than one hundred miles apart, and coal can be transported from the former to the latter city at sixty cents per ton. The question then recurs, can we send the coals of Deep River to the vicinity of Newcastle—to New-York? Upon an accurate calculation, made by intelligent and practical men, I am assured that the anthracite coal of Deep River may be placed alongside of the Pennsylvania anthracites in New-York market, and sold on as favorable terms, provided the former are exempt from the onerous tax of pilotage, to which they are now liable. The coals which go from Pennsylvania to New-York, pass through the Morris and Raritan Canals, and are not subjected to fees for pilotage. The coals which pass down the Delaware and Hudson Canal to New-York, are also exempt from any charge of pilotage.

Vessels coming into the Delaware River to load with coal, are also exempted. The fees for pilotage in coming into Cape Fear, over either bar, and going up to Wilmington, amount, upon a vessel of one hundred tons burthen, to about forty dollars, which is a tax of forty cents upon each ton of coal she may carry. If this tax is laid upon the coals of Deep River, they will arrive at New-York taxed with a duty that will disenable them to compete with the coals of Pennsylvania. A tax of forty cents a ton upon a million of tons would amount to four hundred thousand dollars, and is a greater profit than any mining company has ever made, or can make. The boast that the Slack Water Improvement of Cape Fear and Deep rivers affords a cheaper transit to the ocean than any other improvement in this country, of the same length and capacity, would be entirely fallacious with the burthen of pilotage on coal, as forty cents added to the anticipated toll of eight cents, would make the tolls greater than on the Chesapeake and Ohio Canal, or on any one of the Pennsylvania canals. Whether the vast mineral treasures of the valley of Deep River shall be developed, depends upon the view which the people of North Carolina shall take of this momentous subject. When I consider what Maryland and Pennsylvania have done to foster and cherish their great mineral interests, and the magnificent results which have followed the exercise of that parental care, I cannot for a moment doubt as to the course which North Carolina will pursue regarding her great interests. That you may have an adequate impression of the value in which the mining interests of Maryland and Pennsylvania are held in these commonwealths, I will briefly state what each has done for their advancement.

"The Chesapeake and Ohio Canal was constructed at an expense of seventeen millions of dollars. Individual exertions proving unavailable, the states of Maryland and Virginia lent their aid by subscribing money and guaranteeing the bonds of canal directors. All these combined exertions proving insufficient, the state of Maryland waived its priority of lien, for the payment of its advances, and foreign capitalists came to the rescue, and by their aid that great work was completed, and with the sole object to open a path to the ocean for the coal of the Cumberland mountains. In Pennsylvania, since the year 1831, more than six hundred miles of canal, and four hundred and fifty miles of railroad, have been constructed, by state and individual enterprise, almost entirely for the benefit of the coal trade, and at an expense of more than thirty-eight millions of dollars. The results have shown the wisdom of those gigantic expenditures. That as great results will follow from the development of the coal mines of Deep River, no well-regulated mind

can doubt. It is a law of philosophy, that similar causes will produce similar effects, and I am yet to be informed that this law does not hold good to the south as well as to the north of Mason & Dixon's line. If, in Pennsylvania, cities have sprung up, under the influence of the coal trade, with a suddenness that reminds one of the fable in the *Arabian Nights'* Entertainments, where palaces were built in a single night by the magic influence of the lamp of Aladdin, why may we not expect to see the borders of Deep River, within a very few years, inhabited by a dense population, and adorned with flourishing villages and cities, and Wilmington, with her increased commerce, approximate to the wealth and splendor of Philadelphia? That similar results will follow from the development of the mineral riches of Deep River, is as certain as the law of cause and effect. That they will follow more rapidly than they have done in Pennsylvania, is equally certain.* Pennsylvania, at the commencement of her mineral operations, had to contend with prejudices as to the use of her anthracite—prejudices which experience has conquered, and you will not have to overcome.

"In eight years from the opening of the Pennsylvania mines, she had sent to market less than two hundred and fifty thousand tons. A greater amount can be sent from Deep River in two years from the opening of her navigation. It was twenty-two years before Pennsylvania had sent to market in any one year a million of tons. Deep River can send that amount within five years. If capital and enterprise will do for North Carolina what they have done for Pennsylvania, then will the future progress of North Carolina be more rapid than has been the past progress of Pennsylvania. In Pennsylvania the soil and climate are against her; in North Carolina they are in her favor.

* The navigation of Cape Fear and Deep

* The wonderful rapidity with which villages and cities have sprung into existence in the mining districts of Pennsylvania, may be instanced in the cases of Carbondale, Honesdale and Pottsville, among hundreds of others. In 1838, there was but one building on the site of Carbondale, and that a log tenement. In 1845, it contained a thriving and industrious population of 3,500, occupying good buildings. Honesdale was covered by the primitive forest in 1838; in 1845, it contained a population of from 2,500 to 3,000 persons. And all this prosperity arose from the mining of less than three and a half millions of tons of coal. The same amount mined on Deep River would produce necessarily the same results. In 1835, commenced the first mining operations of Schuylkill county. In 1841, the central town of Pottsville, originating at a later date than we have quoted, contained the following establishments for the education of the children of the miners and new-settled residents: Six private schools, numbering 470 pupils; eight public schools, numbering 473 pupils; eight Sunday schools, numbering 1,137 pupils; teachers, 166; total, 2,134, with a library of 1,659 volumes. Pottsville now contains a population of nearly fifteen thousand.

rivers is never interrupted with ice. The canals of Pennsylvania are frozen up four months in the year. During that period, the bituminous coals of Deep River can go north, or seek the more profitable markets of Charleston, Savannah, Texas, Mexico, and the West India Islands. Another advantage in favor of North Carolina, is the natural fertility of her soil, while the coal regions of Pennsylvania are sterile and unproductive in agricultural products. Deep River and the adjacent country, with the aid of the fertilizing manures, lime, plaster, and guano, which will form the return cargoes of coal vessels from the north, will become in a few years the *NILX* OF THE SOUTH. Its products will quadruple, and will find a HOME MARKET on the spot which produces them.

"The iron ore of Deep River forms an important item in this estimate. Iron of as good quality, and in as great abundance as in any country, is found in North Carolina. On Deep River it is in immediate contiguity with the coal. On the land of Peter G. Evans, Esq., the coal is overlaid by a stratum of iron ore, three feet in thickness, which yields fifty per cent. of iron. The coal which underlies it is six feet thick, and of that kind best adapted for the manufacture of iron. The iron, when manufactured, can be transported to New-York at a less cost than it can be sent to the same market from the celebrated works at Danville or Northumberland, on the Susquehanna. It can be also manufactured at less expense, as those establishments pay a higher price for their coal than it can be procured at on Deep River. At Danville and Northumberland, the coal costs \$2 50 a ton. On Deep River it can be had for the price of mining it, as those who own the iron own the coal. But the iron need not be sent abroad for a market. There is a better market at home. The time will undoubtedly come, when the manufactures of iron on Deep River will supply the wants of a large extent of country beyond the limits of North Carolina.

"The water-power on Deep River is scarcely equalled in any part of our country. In cheapness, it is unrivalled. Dams, which, in most situations, are expensive structures, are here already built without charge to the owners of the adjacent lands. Eighteen of these are already constructed by the navigation company of Deep River. *Such are the prospects of the valley of Deep River.* And in view of them, can the most skeptical doubt of the *magnificent future* of that favored region? or that the progress of population and improvement will advance with a more rapid pace than it has ever done in Pennsylvania? Should foreign capitalists hereafter be induced to associate with your people in developing the treasures of Deep River, its coal, iron, and other minerals, the present holders of the land will part with their interests upon the

full knowledge of their value; and the capital that may find its way thither, from other regions, will form part of that fund which is to contribute to the support of your state government; and the laborers, mechanics, and tradesmen who may accompany or follow it, will mingle with your people, become identified with your interests, and add to the wealth, population, and strength of your native state."

NORTH CAROLINA.—ITS RESOURCES, MANUFACTURES, ETC.—Alexander McRae, Esq., President of the North Carolina Railroad Company, was kind enough to furnish the following paper, prepared with some pains at our particular request. General McRae complains of his having been baffled in obtaining information from most of the sources to which he had written, and that "he gives these detached items, since there is no possibility of making up a full and correct table."

In the state of North Carolina there are at present in operation (1847)

- 25 Cotton factories,* running 48,000 spindles, † and 438 looms, employing 1,323 hands, and using about 5,600,000 pounds of cotton. The capital invested in these factories is about \$1,200,000.
- 8 Furnaces for cast iron.
- 43 Bloomeries.
- 2 Paper mills, producing in value \$8,775.
- 323 Flouring mills, producing 87,641 bbls. of flour.
- 2,033 Grist mills, and 1,060 saw mills.
- 46 Oil mills.
- 353 Tanneries, producing 161,082 sides of leather, and employing a capital of \$271,797.

In the fisheries on Albemarle Sound, the capital employed is estimated at \$300,000. There are employed in these fisheries 5,000 hands, who put up about 90,000 barrels of herrings, besides a considerable quantity of shad and rock fish.

These fisheries give employment to 200 vessels, and use 100,000 bushels of salt.

PRODUCTS OF NORTH CAROLINA.

1,960,855	bushels of wheat.
8,574	" barley.
3,193,941	" oats.
213,971	" rye.
15,391	" buckwheat.
23,893,763	" Indian corn.
2,609,239	" potatoes.
2,820,388	pounds of rice.
16,772,359	" tobacco.
51,926,190	" cotton.

* And three others in progress of construction.

† This item is no doubt below the mark.

17,168	pounds of sugar.
3,014	" silk cocoons.
102,369	tons of hay.
9,880	" hemp and flax.
There are 2,902 distilleries, producing 1,051,979 gallons.	

MINES.—The state is rich in mines of gold, silver, copper, iron and coal; but it is not possible at present to obtain any thing like correct statistics of their number or value.

In the May number of Commercial Review, 1847, we gave the commerce of Wilmington. It contains 10 steam saw mills, 4 planing mills, 17 turpentine distilleries, with 45 stills.

DISMAL SWAMP CANAL.—There passed through the Dismal Swamp Canal, from North Carolina to Norfolk, Va., from the 1st October, 1846, to the 31st July, 1847, (ten months,)

Building shingles.....	20,758,350
Two feet shingles.....	732,390
Three feet shingles.....	874,310
Total.....	22,360,050
Hoghead staves.....	4,881,640
Barrel staves.....	284,520
Pipe staves.....	90,090

Total.....	5,256,350
Cubic feet of plank and scantling.....	139,100
Cubic feet of timber.....	48,685
Bales of cotton.....	3,723
Barrels of fish.....	47,386
" naval stores.....	30,505
" spirits turpentine....	688
Owts. of bacon.....	4,366
Kege of lard.....	1,299
Bushels of corn.....	1,261,099
" wheat.....	26,225
" peas.....	21,956

The *Newbernian* gives the following in relation to turpentine:

THE TURPENTINE BUSINESS.—We find the impression to be, that about 800,000 barrels of turpentine are now annually made in this state. The estimated value to the makers is about \$1,700,000 annually, and may be \$2,000,000. About four or five thousand laborers are engaged in making it, and perhaps three times as many more human beings are supported mainly from the proceeds of its first sale. It is supposed that there are now in operation about 150 stills, which, at an average cost of \$1,500, with fixtures, shows that there is an expenditure of \$225,000 to begin with in the distilling of turpentine.

NORTH CAROLINA.—She possesses so many advantages of soil and climate, and exhibits so great variety in her natural capacities, that I have deeply regretted that she was so little appreciated and so badly understood. But the present is a most inauspicious period

to undertake the subject with any hope of doing justice to its claims. Our information must be derived from census returns, and from the observations of intelligent persons, scattered throughout her limits. As to the former, that of 1840, if it had been taken with accuracy, is now too old to be of much value—especially as, since that time, we have erected many cotton factories throughout the state, of which we have no accurate information, and have made many discoveries in gold mines, and embarked much capital in that branch of business, in regard to which the last census could give no idea. I had determined therefore to wait until the information could be prepared from authentic sources, and something like justice done to the state. I may add, in this connection, that the state is advancing and her prospects are brighter than at any former period. Several works of internal improvement of great importance are now in a course of prosecution, which when completed will exert a most important influence. Of these, the Charlotte and South Carolina Railroad, beginning at Columbia and terminating at this place, is advancing rapidly toward completion, and will bring to the rich valleys of the Yadkin and Catawba the means of immediate intercourse with the city of Charleston. This work will subserve the interests of all that region lying at the base of the Alleghany Mountains and extending eastward to the Yadkin river. I have taken the liberty to inclose to you a report, made some two years since, and written by myself.

The work had its beginning in that feeble effort, and is now placed beyond the chances of failure. The General Assembly of our state at its last session incorporated a company for the construction of a work two hundred and ten miles in length, from this village to Goldsboro', on the Wilmington and Weldon road. This great work spans the finest and most improvable portion of North Carolina—will accommodate a population of three hundred thousand, and bring into immediate connection with the markets of our own state, Virginia, and South Carolina, a country unsurpassed in its natural fertility, in variety of production, in mineral resources and capacities for manufactories. To insure its success, the state has appropriated two millions of dollars toward the enterprise, being two-thirds of the entire capital. At the same session they incorporated a company for the construction of a plank road, beginning at Fayetteville, on the Cape Fear river, and extending to Salisbury, on the Yadkin, in the western portion of the state. The entire stock of this work is now taken, and its construction is in progress. This road will be one hundred and twenty miles in length, and will be the first work of this description undertaken in the south. Of its completion there is no question.

After years of disappointment and inacti-

vity, I trust that the state of North Carolina will yet rise superior to the obstacles which grew out of her inhospitable coast and her inconvenient geography, and march side by side with her sisters in the course of improvement. She has sons within her borders who will not fail in their labors to bring her up to the enjoyment of the highest advantages afforded by the improvements of our times. In this state of things I have thought it advisable to delay the publication of the article you desire. It is probable that I may send you something on some branch of her interest, which may be adapted to the character of your valuable periodical. I have written in great haste, and with the disadvantages of bad materials.—Respectfully, &c.,

JAMES W. OSBORNE.

We make the following extracts from the report referred to by Mr Osborne :

NATURAL ADVANTAGES.—"The counties of Anson, Union, Mecklenburg, Lincoln, Iredell, Rowan, Cabarras, Stanly, and Davidson, have for many years been engaged in the culture of cotton, while the counties of Burke, Caldwell, Catawba, Wilkes, Stokes, and Surry, most of them affording the most productive lands on the upper waters of the Yadkin and Catawba, are finely adapted to the production of Indian corn, wheat, and other grains. To these are added great and undeveloped mineral resources, embracing ores of iron, copper, and gold, scattered over its whole length, and furnishing a new field for capital and enterprise. But if nature has provided it with a rich soil, she seems to have almost exhausted her energies in the amplitude of its facilities for purposes of manufacture. The innumerable streams which flow from the mountain region which lies on the north and northwest—including the two large rivers which receive them—furnish the water power to the hand of the artisan, in a state almost fitted for immediate application. Yet we cannot hide from ourselves the painful conviction that, with all these natural advantages, the interests of our country are rapidly declining, her enterprising citizens have left us in thousands—while those who remain are unsettled, dissatisfied, and preparing to join their predecessors in other spheres, where their energies may have freer scope and their labors be better rewarded."

RESOURCES AND PROSPECTS OF NORTH CAROLINA.—"An allusion has already been made to the natural advantages of western North Carolina for a system of manufactures. Public attention has been to some extent devoted to this subject, and within a few years several factories of cotton have been erected, and all of them are in successful operation. Within the region of country to be benefited by this road, there are seven factories, employing a capital of three hundred thousand dollars,

and consuming not less than five thousand bales of cotton. By giving employment to the poor of the country and furnishing markets for almost every species of agricultural production, they have a most beneficial effect on the prosperity of the communities in which they are situated. This business was originally designed for the home market. But it has been ascertained by the experience of a few years that reliance cannot be placed on that market, and accordingly, most of those engaged in it are directing their attention to the northern cities, where it is found that the fabric of this region compares most successfully with that of the north. These arrangements divest the pursuit of all uncertainty and hazard, and give the assurance that there may be no limit to the quantity manufactured, as there is no boundary to the market to be supplied. But it cannot be expected that a branch of business so important to the welfare of the country can be adopted to any extent proportionate to our abilities and wants, unless we have immediate access to the seaboard. With this desideratum, western North Carolina must become the most important manufacturing region south of the Potomac. The great branches of manufacture—cotton, wool, and iron—entering into the common consumption and founded on the necessary wants of the whole nation, are the great sources of employment and of wealth to the mechanical industry of America. The planting states of the south and southwest, being wholly consumers and not producers of these necessities, are the great markets in which they are sold by the manufacturing states of the north. The vast valley of the Mississippi, gathering to itself year by year the agricultural capital of the south, will continue to afford a demand for the coarser fabrics of cotton, wool, and iron, commensurate with its population and the fertility of its soil. The coastwise navigation from the city of Charleston to the cities of the gulf now affords a speedy and safe communication with that vast region, and railroad communications now in progress must soon place that city in still more advantageous connection with its whole extent. It must be supplied with its implements of husbandry and coarse cotton and woollen goods for the clothing of its slaves. If we be but true to ourselves, this trade will be a source of boundless profit to ourselves. The counties of Lincoln, Catawba, Iredell, Wilkes, Ashe, Surry, and Stokes, abound in iron ore of the purest qualities, and in largest quantities. In all of them, by rude and simple processes, its manufacture has been an object of pursuit. In the counties of Lincoln and Catawba it has resulted in large fortunes to individuals, much to the convenience and benefit of the whole community. But the manufacture of iron has been necessarily limited in its quantity and precarious in its progress, as it has never been designed for

any thing beyond the circumscribed circle of the market, in the vicinity of the establishments. Open up a cheap and rapid communication with the city of Charleston, and millions of dollars may be employed where there are now a few thousand. It will be converted at home into the utensils and implements of husbandry, and be transported in this form to the markets of the world. With the increased supply, it must be cheaper to the purchaser at home, and, at the same time, by the larger quantity sold and the speedier returns of sales, there must be increased gain to the manufacturer.

"But there is another pursuit for which the northern counties of Burke, Caldwell, Wilkes, Ashe, Surry, and Iredell are naturally adapted, to which the attention has never been directed, and, so far as your committee know, a single experiment has not been made. It is the growth and manufacture of wool for exportation. Every portion of the United States, with a similar climate, unless it be similarly cut off from intercourse with the world, has given attention to this subject. It is the obvious pursuit of all mountain regions and, both in foreign nations and at home, every such country has her class of shepherds, who subsist by this innocent and primitive employment. Thousands of acres of land, well adapted for pasturage, are unappropriated in the mountain regions of North Carolina, and require but little capital and energy to apply them to the use for which they were mainly intended. But, like all cumbrous articles, wool does not bear our costly modes of transportation."

NORTH CAROLINA GOLD MINES.—The editor of the *Ashborough* (N. C.) *Herald* has recently been making a tour in the gold region of that state. He thus speaks of the Parker mines in Stanly county, which were discovered forty or fifty years ago, and have been worked with various success ever since:

"The gold is principally found in the small streams that flow through the mineral region, or in the low lands adjacent to them, in a stratum three or four feet below the surface. The hills are no doubt rich, but as yet their products have been small, no regular veins having been discovered. The stratum alluded to is dug up and washed in the usual way, by which process gold is found in a granular state. Lumps of considerable size are sometimes found. In 1824, on the lands of Mr. Howell Parker, a lump of four pounds ten ounces, steelyard weight, was found. In 1838, two lumps were found, one weighing three pounds, the other one pound two ounces. Many large pieces, the weight of which we could not ascertain, have been found in different localities. The gold found in these is very pure, being worth 97½ cents per pennyweight. It is greatly to be regretted that they are not worked on a more extensive

scale, and with means proportioned to the profits which they yield."

"Gold Hill," in Rowan county, the editor describes as "the prince of mines in North Carolina." Discovered by Archibald Honeycutt, Esq., about seven years ago, it has since been the field of extensive and profitable operations. At this place there are three steam engines in operation, which, with the machinery thereby propelled, originally cost not less than \$30,000. These engines are severally rated at forty, thirty, and fifteen horse power, and grind from fifty to one hundred and twenty-five bushels of ore per day, and consume from sixty to eighty cords of wood per month. The three companies at this place have one hundred and sixty laborers in their employ, whose wages range from \$5 to \$40 per month. Experienced English miners, who work under ground, receive \$40 per month; slaves who attend them, \$13.

NASHVILLE, TENNESSEE.—There is not perhaps in the West a more interesting view than that commanded from the summit of the Capitol Hill, in the city of Nashville. Covering the base of the hill, and crowding to the extremest margin of the business-laden Cumberland, is the city itself, its streets alive with the bustle of an active commerce, and its suburbs literally growing under the eye of the spectator. Surrounding the city with a border of beautiful cultivation, lie extensive and valuable farms, intersected by the numerous turnpikes, which, centering in the city, radiate to opposite neighborhoods; and girdling in all with a quiet security, rise a range of low and pleasant hills, covered with picturesque woods and graceful dwellings. But it is not so much the beauty of the prospect which attracts the traveller's attention. If he has learned any thing of the country through which he has passed, and in the heart of which he stands, he knows that he stands in the midst of an untold abundance—mineral wealth forcing itself through the soil, and that soil ready to meet any demand which agricultural industry may make for produce.

Nashville is situated on the left bank of the Cumberland, on an elevated bluff of limestone. Few towns in the west present a more imposing appearance as the traveller approaches it from every side. The eye is delighted with the number of eminences within the city, some of which are partly covered with the native cedar, clothed in living green, which gives it a cheerful appearance even amid the dreariness of winter.

Around the city are a number of beautiful eminences, commanding an extensive, rich and varied view of the surrounding country, from ten to fifteen miles in every direction; from Capitol Hill, within the city, the eye ranges over a large space, covered with rich farms

and neat country seats, cultivated fields waving with that beautiful specimen of the vegetable world, Indian corn, and that valuable staple, cotton. These, if they do not indicate great opulence, at least bespeak that their occupants are in the enjoyment of competence, which generally produces a greater amount of true happiness than overgrown wealth. The contemplation of such a scene recalls the lines of Moore:

—"If there's peace to be found in the world,
The heart that is humble may look for it here."

We have among us many who are rich, but no *millionaires* who wallow in luxuries, and who look down with aristocratic pride upon those of humbler fortune, and who would, if they could, introduce those distinctions in society that would separate them from the "vulgar herd." There are but few whose actual fortunes would amount to the tenth of a million; they may have more in possession, but that possession is often accompanied by a slight drawback—sometimes called "suspicion of debt."

No town in the great valley of the west enjoys in a greater degree the blessings of health. Situated about 36 deg. 30 min., it possesses a temperate climate, and from its local position, it is free from fevers which characterize many of the towns of the west, particularly such as are situated upon water courses, and the lands about them subject to inundations. It is true that a small portion of Nashville, at the upper and lower ends, are, in times of high floods, inundated; but these inundations continue but a few days, and sometimes at intervals of several years, and produce no injurious effect upon the health of the town. Although the summer's heat is occasionally oppressive, the winters are mild and moderate. We have not the severe cold of the northern and eastern states, nor the relaxing heat of the south. Some idea may be formed of the healthfulness of the city from the following statement of deaths during the year 1845, which we take from the returns of the sexton of the cemetery, on the books of the corporation, by which it will be seen that the whole number of deaths was 244, in a population of 12,394.

NAVIGATION.—SHIP-BUILDING IN THE UNITED STATES, BUT MORE PARTICULARLY IN THE WEST.—In a recent number of the *Economist* we alluded to the change then about to take place, and which has since occurred, in the navigation laws of Great Britain, and in the operation of the navigation laws of the United States. We also referred to the impetus which that prospective change had given to the ship-building interest of the former country, causing an advance of at least six per cent. in the price of first class ships, with

a prospect of a still further rise. Capitalists were securing whatever ships could be purchased at their prices, and preparations were evidently making for an effort to profit by the repeal of long existing restrictions. The trade and navigation returns of the United Kingdom for ten months, ending November 5th, afford additional evidence of the activity prevailing in that branch of industry, and in other works requiring timber. For the month ending November 5th, the quantity of imported timber, duty paid, was 210,044 loads, against 169,711 loads in the same month of 1848; showing an increase of 40,333 loads in one month.

There exists no doubt of the expectation of British ship-builders and shippers to compete successfully with the ship-builders and shippers of the United States—albeit the effort may prove a splendid failure. The attempt will be made, and it remains for the latter to decide upon the results.

Considering the many obstacles with which the shipping interest of our country has heretofore had to contend, and the steady increase in tonnage and in the effectiveness of our marine, which, notwithstanding, has taken place, we hazard nothing in expressing the opinion that, whatever may be the advantages derivable from the repeal of the navigation laws, the United States will reap her full share.

The tonnage of this country and Great Britain, including steam, compared in 1848, is as follows: British, 3,397,921; United States, 3,581,931. During the past year, according to the *Dry Goods Reporter*, our mercantile marine has yielded up to the California trade a navy of 700 vessels with a tonnage of 240,000 tons. These vessels are nearly all in the Pacific, and are likely to remain there for some time. Hence it is thought that we are not in the most desirable condition to take advantage of the reciprocity system.

To remedy this disadvantage, a resort must be had to ship-building. Even without the California trade, and from the natural increase of business which would arise from the repeal of the navigation laws, and the usual augmentation of trade, we believe that a large increase in our shipping would be required.

Admitting, then, that more vessels will be needed in the commerce of the two countries, the next question to determine is the place of their construction. If British subjects require more ships, and American built vessels can be sold in British ports and registered as ships belonging to that country, as is provided by the existing laws, then, in case we cannot compete in the carrying trade, which no doubt we can, we may, perhaps, find a market there for those vessels which may be constructed at home. If we can build all kinds of vessels superior in every respect to those built in Sunderland, Yarmouth, and other ship-build-

ing cities of England, and afford them at a cheaper rate, what is there to prevent the American ship-building interest from ultimately superseding that interest as carried on in other parts of the world, and especially in England?

It is admitted, even on the part of English ship-masters and carpenters, that American vessels are superior, both in their model and effectiveness, to those of the same class of British construction; and we know that, in cost of material, we have a decided advantage. Every foot of timber used in a British built vessel is imported, and subject, with slight exception, to tariff charges. To these charges add transportation—and the money cost of timber, hemp, &c., necessary for the construction of a perfect vessel very much exceeds the cost of the same in the United States. The *Newburyport Herald*, very excellent authority in such matters, says: "The best ships in England and Scotland cost about \$97 a ton. In the United States our best ships cost about \$65 a ton, ready equipped for sea." This latter statement agrees with information which we have received from an intelligent and practical ship-builder of Newport, R. I. The greatest, and, perhaps, the only advantage which British builders have over us, is in the low rate of interest for which their capital is furnished. A vessel of 500 tons will cost, in England, at the rates given above, \$48,500; the interest on this sum, at 4 per cent, is \$1,940. The same vessel will cost in the United States \$32,500; the interest on which, at 6 per cent, is \$1,950. The British ship-builder, then, for his own use, can better afford to pay \$97 per ton for a vessel than the American ship-builder can pay \$65 per ton. Yet, if the former should attempt to construct vessels for the purpose of selling them in the United States, or in the markets of the world, he would be brought in direct competition with the ship-builders of this country, and could find no purchaser except at a loss. On the other hand, if the American ship-builder takes his vessel to the ports of Great Britain, and sells it at a less money price than it could be built for there, still it yields him a very handsome profit. For instance, the British owner, in order to make sale of his vessel of 500 tons in any market accessible to American enterprise, would be forced to sell at the cost of an American vessel of the same class, or \$32,500, or at a loss of \$16,000. The American owner, however, could take his vessel to a British port, and sell at the actual cost of a British vessel of the same class, and yet make a profit of \$16,000. The advantage, then, of the American ship-builder, under the reciprocity system, is very decided and important. It is an advantage which fully warrants the conclusion that the British ship-building interest must, notwithstanding its present flat-

tering condition, ultimately and speedily succumb to the growing energies and capabilities of America.

In the estimates now made, we have compared British prices with those which obtain in our eastern states, where ship-building is chiefly carried on, and have found results highly favorable to the latter. But there is another picture, upon which we may look with still more satisfaction. The west, the great and illimitable west, with its unmeasured resources, has not yet entered into computation. We turn, therefore, to a comparison of her advantages with those of the east, already enumerated.

For the estimates given below, wherein reference is made to eastern prices, we are partly indebted to Mr. William C. Crandall, an intelligent and experienced ship-builder of Newport, R. I., and partly to the New-York Prices Current.

EASTERN PRICES OF SHIP-BUILDING MATERIAL.

White oak timber per cubic foot.....	20 to 30 cts.
Locust timber per cubic foot, depending on size.....	50 " 100 "
White oak scantling per 1,000 feet.....	\$25 " \$30
White oak plank, 2 inch, per 1,000 feet.....	35 " 60
Masts and spars sixty to seventy feet long, fifteen to twenty inch.....	35 " 50
Masts and spars eighty to ninety feet long, twenty to twenty five inch.....	75 " 150
Hemp per ton of 2,240 lbs....	150 " 160

PRICES OF SHIP-BUILDING MATERIAL ON THE LOWER OHIO.

White oak timber per cubic foot	5 to 10 cts.
Locust timber per cubic foot, depending on size.....	16 " 32 "
White oak scantling, depending on size, per 1,000 feet.....	\$10 " \$15
White oak plank, two inch....	10

Masts and spars from Salt River, Ky., and from the Alleghany, Kanawha, and Cumberland rivers, can be furnished at less than one-half their eastern prices.

Hemp can be afforded here at prices varying from \$70 to \$100 per ton, of 2,240 pounds.

We have also other timber, such as poplar, chestnut, and black walnut, and at corresponding prices. We have soft iron ore for fastenings, anchors, and cables.

The quality of our timber is excellent. Some of it, growing as it does upon the hills bordering on the Ohio, is pronounced by competent judges to be superior to that which is often used at the east.

By examining the above tables of prices, it will be observed that in cost of materials there enumerated, our advantage over eastern ship-builders varies from 50 to 800 per cent. Added to these advantages is another important item, and one to which we have frequently alluded in our former numbers. Our western rivers afford the finest facilities for conveying large ships to the ocean, and which can be freighted with our own produce, and at our own doors. Even our comparatively small streams in periods of high water are sufficient to float immense navies. Vessels thus loaded can proceed immediately to eastern or foreign ports, where their cargoes may be disposed of at greater profit than could be done were they freighted at New-Orleans, where our western produce is subjected to considerable charges previous to being shipped. Considering the amount of western products which find an outlet to the ocean by way of New-Orleans, it is worthy the attention of shippers and capitalists to investigate, and ascertain the cheapest modes by which it can be accomplished.

To the subject of western ship-building we have but briefly adverted, but in that brevity have endeavored to state some of the facilities and inducements here offered for the prosecution of that species of industry. We have no disposition to deal in exaggerated statements—nor do the real capacities of this western country need them. The west puts forth her claims for the consideration of the laborer and capitalist, unmasked and uncolored. She only stands up before the world and says, "Look at me, and behold my possessions!" This is all that is necessary. Enlightened self interest will make the proper disposition of those possessions. If this be done, in reference to the subject in question, there need be no fears entertained as to the results, and but a short period will elapse before old Neptune will rise from his couch in the deep, and shake his "watery locks" in the wake of those navies which shall go forth from our inland streams to ride less circumscribed upon the bosom of the great waters.

NAVIGATION.—THE MERCHANT FLEETS AND NAVIES OF THE WORLD.

"The armaments which thunder, strike the walls
Of rock-built cities,

The oak leviathans whose huge ribs," &c.—BYRON.

Every classical reader will remember that famous catalogue of ships from all countries which Homer furnishes us, before the walls of Troy. After the fame of their deeds and the pomp of the enumeration, we are surprised to reflect that they were but "open row boats or canoes!"

The Greek fleet, 600 years later, at Salamis, was but half-decked; the soldiers being sta-

tioned on platforms at each extremity, and the middle of the frail boats was left open for the rowers. The vessels composing the expedition of Nearchus into India, long afterwards, were row-galleys, capable of being hauled up on shore with convenience, and not comfortable enough to allow the mariners to remain two consecutive nights on board!

The Romans began to build their navy on the model of a Carthaginian ship thrown upon their shores; and the vessels were of so large a size when Julius Cæsar invaded England, that they could not approach near enough to the shore for the soldiers to disembark; "but they were obliged to jump into the water, which was breast high."

The northern Sea Kings, who spread such terror over Europe after the downfall of the Roman power, covered every sea with their fleets, which had no other guides than the sun by day and the stars by night. Their vessels are described as large flat-bottomed boats, of light timber, the sides and upper works of wicker, with a covering of strong hides. They were transported on wagons from one river to another. It can scarcely be credited that these vessels were used on such perilous voyages.

But we have not time nor space to follow with particularity the slow progress of naval and maritime architecture from these rude beginnings. It would, without doubt, be a most interesting study.

Our purpose is now to take up the leading powers of the world, and exhibit their respective naval and maritime strength, by a consultation of the best and latest authorities within reach.

1.—GREAT BRITAIN.

"Look at the already immense number of powerful steam-ships that swarm in the waters of the Mediterranean, and enter every port upon its beautiful shores; that are found careering in every sea of Europe, from the Frozen Ocean to the Bay of Biscay and the Black Sea; that have long since driven every other mode of transit out of the Euphrates and the Red Sea; that penetrate the Indus almost to its source; that ascend the Canton river, in spite of every obstacle, besides myriads of war-junks, and batter down the walls of the ancient celestial cities; that are surrounding every island and entering every harbor in the West Indies; that swarm along the shores of North America, from the Gulf of St. Lawrence to the Isthmus of Darien; and that regularly transmit the rich produce of the mines of South America, from all its principal ports on the east and west side to the great commercial metropolis of the world—crowded, busy London. Look at all this, and see what an element she has to sustain her in her onward march for empire. At no

period did Great Britain possess such a foundation for naval strength within her bosom as at present. She now possesses 3,500,000 tons of shipping, and numbers 160,000 seamen in her commercial navy, while a fleet of 700 steamboats (more than is possessed by all the rest of Europe) prowl along her shores."*

In 1793, the British navy consisted of 153 line of battle ships, hulks and vessels on the stocks.

LINE OF BATTLE SHIPS OF ALL NATIONS, 1793.

France	86
Spain	68
Russia	36
Holland	28
Denmark	24
Portugal	13
Turkey, Naples, and Mediterranean powers	13
Britain	153

Or, a little more than one half possessed by Great Britain. In 1844, Britain possessed nearly as many such ships as all the rest of the world together.

LINE OF BATTLE SHIPS, 1844.

France	45
Russia	50
Egypt and Turkey	19
America	10
Naples	1
Holland	8
Spain	3
Portugal	2
Denmark	6
Sweden	10
Britain	125

ACCOUNT OF THE PROGRESSIVE INCREASE OF THE ROYAL NAVY, FROM HENRY VIII.'S REIGN TO THE CLOSE OF THE LAST WAR, 1814.

Year.	Ships.	Tons.	Men voted.	Navy estimates.
1521..	16	7,260	—	No account.
1578..	24	10,506	6,700	—
1603..	42	17,055	8,346	—
1658..	157	57,000	21,910	—
1688..	173	101,892	42,000	—
1702..	272	159,020	40,000	£1,056,915
1760..	412	321,134	70,000	3,227,143
1793..	498	438,226	45,000	5,525,331
1800..	767	668,744	135,000	12,422,337
1808..	869	892,800	143,800	17,496,047
1814..	901	966,000	146,000	18,786,509

In 1814, Great Britain had 901 ships, of which 177 were of the line; and in 1850, 921 ships.

* We are indebted for these facts to the able work of P. L. Simmonds, Esq., of the Colonial Magazine of London.

NAVIGATION—MERCHANT FLEETS AND NAVIES.

BRITISH NAVY, 1816.						
	At sea.	In com.	In ord'y	Build- ing ships.	G'd	
Ships of the line..	12	11	99	130	18	2
From 50 to 44 guns.	2	3	5	19	—	—
Frigates.....	32	7	40	88	9	1
Sloops, &c.....	14	6	20	24	1	0
Brigs.....	46	17	63	117	5	0
Cutters.....	3	1	4	2	—	0
Schooners.....	3	4	7	5	—	0
Bombs.....	—	—	—	6	—	0
Hospital ships, &c.	—	—	—	—	—	4
Grand total.....	112	49	168	391	33	7

The expenses of the navy for the year ending 5th July, 1848, were £6,557,201.

BRITISH NAVY, 1842.		In Ordinary.—No.
First Class.....	16	
Second ".....	15	
Third ".....	46	
Fourth ".....	33	
Fifth ".....	64	
Sixth ".....	10	
Sloops.....	8	
Brigs.....	15	
Packets.....	11	
Cutters.....	6	
Steam Vessels.....	16	
	240	

NAVAL FORCE OF GREAT BRITAIN, 1846.

	In Commission.		Building.		In Ordinary.		Total.
	No.	Guns.	No.	Guns.	No.	Guns.	
Ships of the line.....	17	1,570	23	2,124	75	6,258	115
Frigates.....	32	1,148	15	498	73	3,066	120
Sloops, brigs, and bombs.....	71	856	21	305	40	521	132
Schooners, cutters, tenders, and ketches.....	33	66	—	—	6	18	39
Steam frigates.....	6	60	12	120	4	40	22
Steam sloops.....	54	270	20	100	6	30	80
Steam packets.....	21	42	3	6	—	—	24
Other steamers.....	9	18	6	12	—	—	15
Transports and troop-ships.....	5	70	—	—	—	—	5
Receiving ships, coastguards, & other non-effective vessels, as coal depots, convict hulks, &c., employed in service connected with navy.....	84	485	—	—	—	—	84
Total.....	332	4,583	100	3,165	204	9,938	636

The official list numbers 671 vessels, but names only 636; whole number of guns to 636 vessels, 17,681; number of men in the navy, 27,500; boys, 2,000; marines, 10,500—total 40,000. Revenue vessels, 72, mounting 144 guns; British Indian Navy, 1844-45, 36 vessels, of which 22 are steamers—guns 166. Total number of steamers in the English navy, including 35 contract mail-steamers, 199. There are eight East India mail-steamers.

2.—UNITED STATES.

In 1780, a Committee of Congress reported but four American war vessels fit for service.

	In Commission.	
	No. ships.	Men.
First Rates.....	2	1,950
Second ".....	6	4,700
Third ".....	7	4,500
Fourth ".....	8	3,801
Fifth ".....	12	4,000
Sixth ".....	14	2,990
Sloops.....	41	5,458
Steam Vessels.....	66	3,666
Gunboats.....	39	1,602
Packet Brigs.....	7	308
Surveying Vessels.....	14	1,014
Yachts.....	3	289
Stationary Ships.....	14	5,368

We shall now draw for the remainder of our paper upon official documents, presented in 1846, by Mr. Bancroft, to the Senate of the United States. They were prepared by a Board of Naval Officers, and embrace all the nations of the world.

charge was taken from the Secretary of War and given to an independent department. In 1801, a treaty being made with France, the President was authorized to sell all the naval vessels, except the frigates Constitution, United States, Congress, Constellation, President, Chesapeake, Essex, Philadelphia, New-York,

Boston, John Adams, Adams, and General Greene.

From this period, the growth of the navy has been steady, "fighting itself" as it has been said, "into favor," and into its present stature. We now proceed to furnish a few tabular statements.

AMERICAN NAVAL VICTORIES, 1812—1815.*

	Guns mounted.	Killed and wounded.	Captured vessels.	Guns mounted.	Killed and wounded.
Essex.....	46	—	Alert.....	20	2
Constitution.....	54	14	Guerriere.....	49	76
Wasp.....	18	10	Frolic.....	22	75
United States.....	54	12	Macedonian.....	44	104
Constitution.....	54	34	Java.....	49	161
Hornet.....	20	5	Peacock.....	22	40
Enterprise.....	—	14	Boxer.....	18	—
Lawrence.....	20	83	Detroit.....	19	—
Niagara.....	20	27	Queen Charlotte.....	17	—
Caledonia.....	3	3	Lady Provost.....	13	—
Ariel.....	4	4	Hunter.....	10	—
Scorpion.....	2	2	Little Belt.....	3	—
Somers.....	2	2	Chippewa.....	1	—
Trippe.....	1	2			
Tigress.....	1	—			
Porcupine.....	1	—			
Peacock.....	20	2	Empervier.....	18	23
Wasp.....	20	26	Reindeer.....	19	67
Wasp.....	20	3	Avon.....	19	43
Saratoga.....	26	57	Confiance.....	39	—
Eagle.....	20	33	Linnæ.....	16	—
Ticonderoga.....	17	12	Chub.....	11	—
Preble.....	7	2	Finch.....	11	—
10 Gallies.....	16	6	13 Gallies.....	18	—
Constitution.....	54	15	Levant and Cyane.....	56	120
Hornet.....	20	12	Penguin.....	20	43

UNITED STATES VESSELS, 1799.†

Frigates.	Guns.	Cost.
United States.....	44	\$299,336
Constitution.....	44	302,718
President.....	44	220,910
Constellation.....	36	314,212
Congress.....	36	197,246
Chesapeake.....	36	220,677
New-York.....	36	159,639
Philadelphia.....	32	179,349
Essex.....	32	189,362
John Adams.....	32	118,505
Adams.....	32	76,622
Boston.....	32	119,590
General Greene.....	24	105,492
Washington.....	24	69,024
Insurgent.....	36	96,640

Ships.	Guns.	Cost.
Ganges.....	24	\$80,640
Portsmouth.....	24	59,561
Merrimack.....	24	46,170
Connecticut.....	24	57,260
Baltimore.....	20	56,277

	Guns.	Cost.
Delaware.....	20	59,563
Maryland.....	20	70,249
Patapsco.....	20	73,164
Herald.....	18	47,780
Trumbull.....	20	53,494
Warren.....	20	34,702
Montezuma.....	20	55,732

BRIGS: Norfolk, 18 guns; Richard, 18; Augusta, 14; Pickering, 16; Siren, 16; Argus, 16; Hornet, 16.—SCHOONERS: Enterprise, 14; Experiment, 14; Vixen, 14; Nautilus, 14.—GALLEYS, South Carolina, Charleston, Beaufort, St. Mary's, Savannah, Protector, Mars, Governor Davie, Governor Williams.

UNITED STATES NAVY, 1812.

	Guns.
Constitution.....	44
United States.....	44
President.....	44
Chesapeake.....	36
Constellation.....	36
Congress.....	36
Essex.....	32
New-York.....	36
Boston.....	32

* Seybert. For later statistics, see future volumes.

† Seybert's Statistics of United States.

Adams.....	32
John Adams.....	26
Wasp.....	16
Hornet.....	16
Siren.....	16
Argus.....	16
Oneida.....	16
Vixen.....	12
Nautilus.....	12
Enterprise.....	12
Viper.....	12
Bomb Vessels:	
Etna,	
Vesuvius,	
Vengeance, and	
Spitfire.	
170 Gun-boats.	

UNITED STATES NAVY, 1815.

24 ships.....	916	guns
16 brigs.....	236	"
29 schooners.....	94	"
6 sloops.....	23	"
3 ketches.....	—	"
17 galleys.....	84	"
51 barges.....	84	"
124 gun-boats.....	179	"
5 fighters.....	6	"
2 floating batteries.....	64	"
Total guns.....	1,636	

During the war, the Americans lost the following vessels:

Nautilus, 16 guns, taken by Shannon frigate.	
Wasp, taken by Poictiers, 74-gun-ship.	
Vixen, 16 guns, taken by Southampton, 38 guns.	
Chesapeake, 49 guns, taken by Shannon, 53 guns.	
Argus, 20 guns, taken by Pelican, 22 guns.	
Essex, 46 guns, taken by Phoebe, 53, and Cherub, 28 guns.	
President, 53 guns, by Majestic, and frigates Endymion, Pomone, and Tenedos.	
Rattlesnake, 14 guns, taken by Leander, 50 guns.	
Frolic, 18 guns, taken by Orpheus frigate.	
Viper, taken by Narcissus frigate.	
Brig Siren, taken by Plantagenet, 74 guns.	
Adams, 33 guns, destroyed to save from enemy.	
Boston, 32	destroyed by order of Secretary of Navy, when the British were about entering Washington.
New-York, 36	
Argus, 13	
Columbia, 44	

AMERICAN NAVY YARDS.

"The navy yards of the United States,* like those of Britain, are 7 in number, viz, Ports-

mouth, in New-Hampshire; Charlestown, near Boston, Massachusetts; Brooklyn, New-York; Philadelphia; Washington; Gosport in Virginia; Pensacola, Florida.* None of these, however, are so extensive, so well furnished and stored with the muniments of war, so efficiently kept up, or so conveniently situated on the sea-coast, as are our Portsmouth, Plymouth, Pembroke, and Sheerness yards. The Americans have also commanders of naval yards located at Baltimore and Charleston, two leading ports, but there are no regular government establishments or conveniences for building and repairs in those harbors.

"PORTSMOUTH.—This dock-yard is situate at Navy Island, on the east side of the river Piscataqua, three miles from the ocean. There is every convenience for the construction of vessels of the largest class. The harbor of Portsmouth is a fine one, with forty feet of water in the channel at low tide, and is well protected by its islands and headlands from storms. The tide, which here rises ten feet, flows with so rapid a current as to keep the harbor free from ice.

"BOSTON.—The navy yard of this port is situated at the southeast part of Charlestown, about a mile to the north of the city of Boston. There is a dry dock built of hewn granite. The yard covers sixty acres of land, on which are erected a marine hospital, a spacious warehouse, an arsenal, powder-magazine, and a house for the superintendent, all of brick; there are also two immense wooden sheds, under which the largest vessels of war are built.

"BROOKLYN.—The naval yard, situated on Wallabout Bay, covers forty acres of ground, inclosed by a brick wall on the land side, and contains two large ship-houses, seven extensive timber sheds, built of brick, and several workshops, offices for the officers, and extensive store-houses; a dry dock is in the course of formation. The yard is but a short distance from the city of New-York; the width of the ferry is about 700 yards. The naval hospital occupies a commanding eminence half a mile east of the yard, and is a large building surrounded by thirty-three acres of cultivated ground, inclosed by a brick wall.

"PHILADELPHIA.—This naval yard requires no observation. We may, however, remark, that there is in that city a handsome naval asylum or marine hospital, capable of lodging 400 persons, erected at a cost of upwards of \$300,000.

"WASHINGTON.—The navy yard is situated on the Anacostia or eastern branch of the Potomac, 295 miles from the ocean by the course of the river and bay. It is about three

* We extract from Simmonds' Colonial Magazine.

* Also add Charleston, S. C., and Memphis, Tenn., where works, &c., exist.

fourths of a mile southeast of the capital, and contains twenty-seven acres. It has houses for the officers, shops and warehouses, two large ship-houses, a neat armory, and every kind of naval stores. Several ships of war, some of which were of the largest class, have been built at this yard. The river has water of sufficient depth for frigates to ascend to the navy yard without being lightened.

"NORFOLK.—The extensive naval yard at this port is situated at Gosport, opposite to Norfolk, on the south side of the river Elizabeth, thirty-two miles from the ocean. This yard possesses a large and extensive dry dock, constructed of hewn granite, capable of receiving a line of battle ship, and which cost nearly \$1,000,000. The harbor is safe and capacious, having eighteen feet of water.

"PENSACOLA.—The United States navy yard here is an important one, distant eight miles from the city, and five from the entrance of the harbor, and covers nearly eighty acres of ground, inclosed by a high brick wall. It contains houses for the officers, and a naval store and other buildings adapted to the convenience of the establishment."

NAMING AMERICAN NAVAL VESSELS.

"There is a matter connected with the naming of American vessels, which may be incidentally adverted to, for the information of professional men: it is this:—A joint resolution of Congress, of 3d March, 1819, requires vessels of the first class to be called after the *states* of the Union; those of the second class after *rivers*; and those of the third class after the principal *cities* and *towns*; but no two vessels in the navy can bear the same name."

3.—THE FRENCH NAVY.

France had, as early as 1681, 60,000 seamen, and in 1791, 100,000, commanding 82 ships of the line and 73 frigates.

FRENCH NAVY, 1839.

Ships of the line, first rates.....	5
" second rates.....	1
" third ".....	7
" fourth ".....	9—22
Frigates, first class.....	12
" second class.....	12
" third ".....	13—37
Steamers, from 4 to 6 guns.....	25—25

NAVAL FORCE OF FRANCE, 1845.

	In Commission	No	Guns	Building	No	Guns	In Ordinary	No	Guns	Total Ships
Ships of the Line.....	17	1,598	25	2,442	4	840	46			
Frigates.....	23	1,184	16	810	6	310	45			
Corvettes.....	17	444	3	90	6	124	26			
Brigs.....	34	464	2	40	21	270	57			
Schooners, cutters, and small vessels.....	37	122	2	12	8	20	47			
Transports, &c.....	33	182	10	40	14	56	59			
Steam frigates.....	5	78	2	12	—	—	7			
Steam corvettes.....	8	62	9	54	—	—	17			
Smaller steamers.....	41	209	3	15	—	—	44			
Total.....	215	4,293	72	3,515	59	1,120	346			

Total guns when all armed, 8,928; men and boys in service in 1845, 27,554. Cannon and powder for service, manufactured at government foundries, &c. The Minister of Marine proposed to increase the navy to the following maximum: 40 ships of the line; 20

to be always ready for sea, and 20 in construction; 60 frigates, of which 40 to be ready for sea, and 10 on stocks; 60 sloops, 60 brigs, and 40 lighter vessels, besides transports. The steam navy to be composed of 100 vessels in all.

4.—NAVAL FORCE OF RUSSIA.

Nicholas has kept a constant eye upon his naval affairs, and has, within fifteen or twenty years, created two large fleets in the Baltic and on the Black Sea.

	Vessels	Guns	No of guns in vessels
Ships of the Line in Baltic.....	30	2,400	Estimated 80 guns each
Frigates in Baltic.....	20	840	" 42 "
Sloops, brigs, and gun boats in Baltic.....	40	820	" 8 "
Steamers in Baltic.....	26	104	" 4 "
Ships of the Line in Black Sea.....	17	1,360	—
Frigates ".....	10	510	5 of 60, and 5 of 42 guns
Sloops and brigs ".....	12	168	estimated 14 guns each
Smaller vessels ".....	18	158	—
Steamers ".....	6	36	" 6 "
The Baltic Fleet has a complement.....			35,000 men
The Black Sea ".....			24,000 "
Total.....			59,000 "
Exclusive of the naval force in the Caspian Sea.			

RECAPITULATION.—(1848.)

Relative naval power of each nation.	In commission		Building, ordinary, &c.		Total		No of men	No war steamers
	Vessels.	Guns	Vessels	Guns	Vessels	Guns		
Great Britain.....	382	4,583	304	13,098	686	17,681	40,000	141
France.....	215	4,298	181	4,635	396	8,928	27,554	68
Russia.....	179	5,896	—	—	179	5,896	59,000	32
Turkey.....	62	2,636	4	24	66	2,660	26,820	9
United States.....	47	1,155	80	1,190	127	2,345	8,724	5
Egypt.....	35	1,448	3	312	38	1,760	—	1
Holland.....	48	302	86	1,344	134	1,646	—	4
Sweden.....	330	660	50	1,196	380	1,856	—	2
Denmark.....	96	344	12	732	108	1,076	—	—
Austria*.....	74	686	—	—	74	686	—	—
Brazil.....	31	450	11	325	42	775	—	8
Sardinia.....	11	226	4	220	15	446	—	3
Spain.....	21	348	—	—	21	348	—	4
Two Sicilies*.....	17	338	—	—	17	338	—	—
Portugal.....	59	—	—	—	—	—	—	—
Mexico.....	23	42	—	—	23	42	—	—

I.—COMMERCIAL MARINE, GREAT BRITAIN.

	Steam vessels.	Tonnage	Other vessels	Tonnage	Crews
United Kingdom.....	897	113,232	23,253	2,994,166	170,162
Isle of Guernsey, Jersey, and Man.....	3	445	763	50,226	5,559
Total.....	900	113,677	24,016	3,044,392	175,691

VESSELS ENGAGED IN COASTING AND FOREIGN TRADE, G. B., 1844.

INWARD—Foreign Trade.		Vessels	Tonnage	Crews
British and Irish vessels.....		19,337	3,647,463	195,723
Foreign vessels.....		9,608	1,402,138	76,091
Coasting Trade.				
Employed between G. B. and Ireland.....		10,147	1,349,273	—
Other coasting vessels.....		123,751	9,615,434	—
OUTWARD—Foreign Trade.				
British and Irish vessels.....		19,783	3,853,332	212,924
Foreign vessels.....		9,816	1,144,846	77,109
Coasting Trade.				
Employed between G. B. and Ireland.....		16,948	1,817,756	—
Other coasting vessels.....		128,294	9,877,105	—

The above list includes all the arrivals and departures within the year, including repeated voyages of the same vessels.

In 1838, McCulloch stated the whole number of vessels owned in the British Empire, including plantations:

* Although the whole naval force of these nations has been placed in the column of "in commission," it is probable that a portion of it is "in ordinary," but it is not known what portion. These nations have a few war steamers, but the number is not known.

† Of the 332 vessels in commission, 84 bear but a nominal armament, although, by the official navy list for January, 1846, they appear to be employed in important service—as receiving, coast-guard, and convict vessels, coal depots, quarantine service, &c.

‡ 323 of this number are gun-boats.

§ 86 of this number are men-of-war cutters and gun-boats.

	Vessels	Guns
| Exclusive of sailing vessels in the Indian navy.....	14	106
" steamers in the Indian navy.....	22	60
" contract mail steamers, under control of government.....	(a) 26	—
" revenue vessels.....	73	144
Total.....	134	310

(a) 1843.

¶ Exclusive of the Caspian fleet.

	No. of vessels.	Total tons.	No. of guns.	Officers and Men.
** Exclusive of United States revenue vessels, consisting of.....	13 sailing.....	1,443.....	61.....	709
	8 steam.....	3,110.....		

	29,912 vessels
	2,420,759 tons
	147,357 men
In 1844, steam vessels in England.....	679 vessels
	75,047 tons
In 1844, steamers in Scotland	137 vessels
	20,666 tons
“ Ireland.....	81 vessels
	17,519 tons
Guernsey, &c., and Colonies.	91 vessels
	12,444 tons

FISHERIES, 1848.

Northern, or Greenland, 16 ships	800 men
Spermoceti whale..... 68	2,176 “
Common oil..... 1	82 “
	85
	8,008

II.—UNITED STATES COMMERCIAL MARINE, 1845.

Estimated number commercial vessels.	19,780
“ tonnage.....	2,416,990
“ men.....	118,600

Of these—

Registered and in foreign trade..	1,093,172 tons
Enrolled coastwise.....	1,190,898 “
Licensed, under 20 tons.....	32,323 “
Enrolled in cod fishery.....	69,825 “
“ mackerel fishery.....	21,413 “
“ whale “.....	206 “
“ cod, (under 20 tons).....	7,168 “

Of the registered tonnage, 745 vessels are in the whale fishery, 237,000 tons and 18,625 men; steamboat tonnage, United States, 816,019; tonnage of lakes, 82,933; 474 vessels, 75 being steam.

III.—FRENCH COMMERCIAL MARINE, 1844.

Number of vessels, (mean of two authorities).	13,782
Tonnage.....	839,608
Of which, vessels employed in whale fishery.	29
Tonnage.....	11,903
Crews.....	866

In 1840, the cod-fishery employed 458 vessels, of 54,588 tons; 9,897 men. In coast fishery, also, 5,849 boats, 40,610 tons, 25,000 fishermen; private steamers in 1844, 225.

RECAPITULATION, 1848.

Nations in the order of their commercial importance	No of vessels in coast & fisheries	Tons	No guns to each (100,000 tons comm)
Great Britain.....	23,898	3,007,581	588
United States.....	19,866	2,416,999	97
France.....	13,782	839,608	1,063
Sweden and Norway.....	5,450	471,772	224
Holland.....	1,528	241,676	688
Russia.....	Not known	289,000	2,406
Two Sicilies.....	9,174	213,196	158
Austria.....	6,199	208,551	321
Turkey.....	2,220	182,000	1,461
Sardinia.....	3,502	167,360	265
Denmark.....	3,036	153,408	709
Portugal.....	798	80,525	—
Spain.....	2,700	80,000	—
Brazil.....	Unknown	Unknown	—
Mexico.....	Unknown	Unknown	—

BRITISH AND AMERICAN TONNAGE, 1842-51.

The following table shows the amount of tonnage which entered the ports of Great Britain and the United States for ten years:

	UNITED STATES.	
	American	Foreign
1842.....	1,510,111	732,776
1843.....	1,143,523	534,752
1844.....	1,977,438	916,993
1845.....	2,035,486	910,563
1846.....	2,221,028	968,178
1847.....	2,101,358	1,120,346
1848.....	2,398,482	1,405,191
1849.....	2,658,321	1,770,515
1850.....	2,673,016	1,779,623
1851.....	3,054,349	1,939,091

GREAT BRITAIN.

	British	Foreign
1842.....	1,680,838	974,769
1843.....	2,919,528	1,005,894
1844.....	3,067,437	1,143,896
1845.....	3,689,663	1,358,735
1846.....	3,622,808	1,407,963
1847.....	4,238,056	1,552,095
1848.....	4,020,418	1,519,046
1849.....	4,890,375	1,680,894
1850.....	4,070,544	2,035,152
1851.....	4,386,248	2,599,988

The above table discloses the fact that in our commercial navy we are but six years behind Great Britain.

NAVIGATION.—VESSELS BUILT IN U. S.

Statement, showing the number and class of vessels built in the United States since the year 1815.

Years.	Ships.	Brigs.	Schooners.	Steamers.	Total No. of vessels.	Total tonnage.	Total men.
1815.....	136	224	680	274	1,314	154,624	39
1816.....	76	122	781	424	1,403	131,668	04
1817.....	34	66	559	394	1,073	86,393	37
1818.....	53	85	428	332	898	82,421	20
1819.....	53	82	473	243	850	79,817	66
1820.....	21	60	301	152	534	47,784	01
1821.....	43	89	248	127	507	55,856	01
1822.....	64	131	260	168	623	75,346	08
1823.....	55	127	260	165	515	622	75,007
1824.....	56	156	377	166	751	90,936	00
1825.....	66	197	538	168	969	114,997	25
1826.....	71	186	489	227	1,073	126,439	35
1827.....	58	133	464	241	996	104,349	67
1828.....	73	108	474	196	851	98,375	58
1829.....	44	68	485	145	743	77,098	65
1830.....	25	56	403	116	637	58,064	94
1831.....	72	95	416	94	711	83,967	69
1832.....	139	143	568	122	1,065	114,030	16
1833.....	144	169	625	185	1,118	161,626	36
1834.....	96	94	497	180	687	118,331	97
1835.....	25	50	302	100	507	47,928	52
1836.....	93	65	444	164	894	113,627	49
1837.....	67	72	507	168	734	122,067	22
1838.....	66	79	501	153	809	113,135	42
1839.....	83	80	430	122	765	130,968	34
1840.....	97	169	738	224	1,228	118,939	92
1841.....	114	101	310	157	782	118,933	71
1842.....	116	91	373	404	1,021	179,063	64
1843.....	58	34	136	173	79	63,617	77
1844.....	73	47	244	279	163	113,537	39
1845.....	124	87	322	342	1,033	146,018	02
1846.....	100	164	576	335	1,175	168,243	93
1847.....	151	168	699	392	1,390	243,732	67
1848.....	264	174	701	547	1,751	316,725	54
1849.....	198	148	623	379	1,348	254,377	47
1850.....	247	117	547	290	1,300	371,718	54
1851.....	311	65	533	233	1,367	296,202	69

TONNAGE OF THE STATES.

Statement, showing the amount of Tonnage owned by each state, engaged in foreign and domestic commerce, for the fiscal years 1850 and 1851.

	1850.	1851.
Maine.....	501,424 78	536,114 44
New-Hampshire..	23,096 38	25,427 54
Vermont.....	4,530 35	3,932 31
Massachusetts...	685,442 76	694,402 93
Rhode Island....	40,499 81	38,050 42
Connecticut.....	113,086 78	116,179 85
New-York.....	944,349 20	1,841,013 62
New-Jersey.....	80,800 46	88,895 90
Pennsylvania....	258,939 48	284,373 64
Delaware.....	16,719 57	11,880 88
Maryland.....	193,087 40	204,444 54
Virginia.....	74,266 05	69,769 42
North Carolina...	74,218 49	40,722 17
South Carolina...	36,072 13	44,187 46
Georgia.....	21,690 14	24,185 24
Florida.....	11,272 76	7,042 08
Alabama.....	24,157 60	21,827 08
Mississippi.....	1,827 62	1,404 09
Louisiana.....	250,089 80	253,284 93
Missouri.....	28,907 67	34,065 46
Illinois.....	21,242 17	23,103 45
Kentucky.....	14,820 19	12,937 60
Tennessee.....	3,776 05	3,587 67
Ohio.....	27,146 54	58,852 24
Michigan.....	38,144 49	41,774 86
Texas.....	3,897 42	4,913 16
California.....	17,691 77	58,476 02
Wisconsin.....	—	2,946 10
Dia of Columbia.	17,010 61	22,903 45
Oregon.....	1,063 48	1,068 43
Total.....	3,535,454 23	3,771,439 43

Steam Tonnage of the U. S. in 1850 and 1851.

	1850.	1851.
Steam registered tonnage.....	44,942 25	62,390 13
Steam enrolled and licensed.....	481,004 65	521,216 87
	525,946 90	583,607 05
Increase.....		57,760 10

Comparison of Tonnage for 1850 and 1851.

	1850.	1851.
Registered tonnage.....	1,585,711 22	1,726,307 23
Enrolled and licensed.....	1,949,743 01	2,046,132 20
Total tonnage.....	3,535,454 23	3,772,439 43

COMMERCE OF THE UNITED STATES—TONNAGE, ETC., OF THE COUNTRY.

Statement, exhibiting the Tonnage of the United States for a series of years; also, showing the comparative increase since the year 1815; and the proportion engaged in the foreign, whaling, and coasting trade.

Years.	Registered tonnage.	Enrolled and licensed tonnage.	Total tonnage.
1815.....	854,294 78	513,833 64	1,368,127 78
1838.....	822,951 88	1,173,047 89	1,995,630 80
1839.....	834,244 54	1,362,234 27	2,096,478 81
1840.....	899,764 74	1,390,999 35	2,180,764 16
1841.....	844,893 42	1,164,940 90	2,130,744 37
1842.....	975,353 74	1,117,431 90	2,090,390 69
1843.....	1,069,305 01	1,149,397 62	2,152,601 93
1844.....	1,068,764 91	1,211,339 11	2,280,695 07
1845.....	1,095,173 44	1,321,829 57	2,417,002 06
1846.....	1,181,286 40	1,431,788 32	2,613,074 81
1847.....	1,241,312 92	1,507,732 80	2,839,045 77
1848.....	1,360,986 85	1,793,185 00	3,154,041 85
1849.....	1,438,941 53	1,895,073 71	3,334,015 29
1850.....	1,585,711 22	1,949,743 01	3,535,454 23
1851.....	1,726,307 23	2,046,132 20	3,772,439 43

Proportion of the Enrolled and Licensed Tonnage employed in the

Years	Registered tonnage in whale fishery.	Coasting trade.	Cod fishery.	Mackerel fishery.	Whale fishery.
1815.....	—	485,066 87	26,370 33	—	1,229 93
1838.....	119,829 89	1,041,105 18	80,064 60	56,649 16	5,229 55
1839.....	131,845 25	1,153,551 80	72,258 68	35,983 87	439 69
1840.....	186,726 64	1,176,694 46	76,085 65	23,269 19	—
1841.....	157,405 17	1,107,067 88	68,551 84	11,321 13	—
1842.....	151,612 74	1,045,753 39	64,804 02	16,096 83	377 21
1843.....	153,374 89	1,076,155 59	61,224 25	11,775 70	143 23
1844.....	168,293 63	1,108,614 44	85,224 77	16,170 66	820 14
1845.....	190,895 65	1,190,898 27	69,825 66	21,413 16	306 93
1846.....	186,980 16	1,289,870 89	72,516 17	36,463 16	439 58
1847.....	193,858 72	1,452,623 35	70,177 52	31,451 13	—
1848.....	192,176 90	1,620,988 16	82,651 19	43,558 78	432 75
1849.....	180,186 29	1,780,410 84	42,970 82	73,853 78	—
1850.....	148,916 71	1,755,796 82	85,646 30	58,111 94	—
1851.....	184,644 52	1,898,401 40	87,475 89	59,539 01	—

NEGRO-MANIA.* — **THE NEGRO AND OTHER RACES OF MAN.**—This is too useful a work to be lightly passed over with the short notice we gave it in our December number. A most valuable compilation it is on the subject of the races; a work of which it would be difficult to show all the merits in a review, for almost every line and word of it deserves to be paused upon. It is itself a review of, and selection from, sundry distinguished authors, who have boldly dared to face the storm of fanaticism, and in spite of the almost universal prejudice of the world, to roll back its tide of error, and with the god-like power of intellect to pronounce the almighty fiat, "Thus far, and no farther!" Some names unknown to science are introduced, to prove by arguments of common sense the necessity of those relations which science shows to be inevitable.

The author of this compilation makes no pretence to originality, but his work is not therefore the less meritorious, and perhaps it is even the more useful, as he has in many of his authorities given such names as only the grossest ignorance can refuse to bow to. A collection of judicious selections, judiciously commented upon, forms in itself a volume of infinite value; and while we disclaim the ability of laying before the public, in a short review, all its merits, we are anxious, as far as we can, to draw popular attention to it. The aim of our author is to *popularize* his subject, to make attainable to the every-day reader the results of learned investigation, and to let every man find within his reach a compendium of such authorities as he often could not afford to purchase, or may not have leisure to study in full. Most warmly do we wish him success in his experiment, and most heartily recommend his work to all. It is time that the subject should be investigated in all its bearings.

Among the authors cited by Mr. Campbell, we find advocates both for the unity and the diversity of man's origin. Prichard, &c., have been boldly quoted, while Morton, Lawrence, Knox, Smith, Browne, Gliddon, &c., are called upon, and most triumphantly, to prove the fallacy of their conclusions. Many strong names which the author might have summoned on his own side of the question, he has (partly perhaps from superabundant material) left aside. From among ourselves, Nott—no mean authority—should perhaps not have been entirely forgotten; but such oblivion may well be pardoned in consideration of what he *has* given us, and he has from a very proper motive drawn his resources less from southern men than from Englishmen and northerners, among whom certainly no one

can look for any weakness or bias towards our southern institutions, in the decision of a question which is of such vital importance to us. It is singular, however, that the great Agassiz should not have been named by him. The opinions of Mr. Agassiz upon this subject are well known, and it shows the richness of material—the overwhelming mass of proof, that such a supporter could be dispensed with.

Our author enters only incidentally upon the question of the origin of the races, and rather turns the force of his argument to prove their inequality. The races exist, and exist with different powers, different instincts, and different capacities. These differences are inalienable and unchangeable. Such are, in few words, the propositions of his argument, and every authority quoted (even that of Prichard, the principal upholder of the unity theory) tends to confirm this position. Whenever and however men have appeared upon this earth, (we, in common with our author, consider the diversity of origin proved beyond dispute,) here they now are—unlike in all things—with the marks of race stamped ineffaceably upon them, in body and in mind; in form, color, instinct and reason—differing in all, and having differed, as is most indisputably proved by historical monuments, for 4,000 years, and by every philosophical deduction must continue so to differ. Man's handiwork will scarce bring about a revolution in despite, as Carlyle would say, "of the immortal gods." Should he try to force it, forgetting the necessary conditions of his existence, "which Nature and the Eternal Powers have by no manner of means forgotten, but do, at all moments, keep in mind, these, they will at the right moment, with due impressiveness, perhaps in rather a terrible manner, bring again to our mind also."

The highest capacity of man, and its noblest use, is the discovery and execution of the Almighty behests,—thus enabling him to second instead of opposing the beautiful order of God's developed thought in creation. If the negro be an inferior man, the struggle against God's will, which aims at putting him upon the same footing as the superior, is only not an impious work, in so far as it is a blind and a foolish one. Folly, unfortunately, often leads to consequences fatal as vice, and there is nothing more mischievous than active ignorance. In the fanaticism which now actually desolates some of the most favored and beautiful parts of our globe, threatening others even at the risk of dragging to earth the high-reared monuments of man's civilization, we find vicious malevolence and ignorance combining their power to raise some higher law than any which God has sanctioned; and because the black man cannot reach the level of the white, they would even drag down and degrade the white to his capacities.

* **NEGRO-MANIA:** being an examination of the falsely-assumed equality of the various races of men. By John Campbell. Philadelphia: Campbell & Power. Octavo, pp. 640.

Can it be that in an age when science walks abroad, astonishing the world by a progress hitherto unequalled in her annals—when no longer, with snail-like advance, she labors the ascent to knowledge, but rather leaps forward to her magnificent conclusions—when she girdles the world with steam, and flashes her lightning thought, even with lightning speed, through the expanse of a continent—when we see her votaries, (in the eloquent language of Professor Lieber,) “like priests of nature, revealing her great mysteries and showing thought,—one thought,—the thought of God, pervading the universe and its phases”—oh! can it be that this is to be swept aside, or rather crushed down to the level of a Haytian civilization! Can it be that the great *one thought*, that *thought of God*, so beautifully pictured out even in the lowest, as in the highest of his works, is to be tinkered at and defaced, patched and plastered, by a set of madmen, whose one idea seems to be built upon some whining, Wilberforcian, Clarksonized wail of “black brethren” and “negro improvement!” Verily, nature “suffereth long and is kind,” or, ere this, had her curse fallen upon us. We struggle against her, we fiercely resist her teachings, and fancy that these poor heads of ours—to say nothing of black Sambo’s and Cuffee’s—can regulate matters by a higher law than hers. But the time cometh when our probation can last no longer. Then, and in “rather a terrible manner,” it is to be feared, we will receive our lesson! Is it not even now, alas, beginning! What is this cry over Etrope, echoing even to our own shores! What means this darkly-shadowed caricature of good—this horrible disfigurement of Christian charity—which, but that it stalks in terrible reality before us, would seem like the mockery of some fearful dream! The angel form which we have gazed upon and worshipped as Christian charity and brotherly love, now suddenly starts forth, grinning upon us in hideous deformity of vice, and gibbering out its horrible obscenities of “socialism” and “communism,” drags along upon its track the shouting mob, who, in their ravings for “negro abolition” and “universal equality,” trample under foot at once God’s law and man’s law—virtue and decency. The demon is unchained. This wide-spread and wider-spread evil figures forth, not badly, the beast of the Apocalypse, unto “whom was given a mouth speaking great things and blasphemies;” “and he opened his mouth in blasphemy against God to blaspheme his name,” “and power was given him over all kindreds, and tongues, and nations.”

The strength of his hideous power is now interesting itself largely in the negro cause; and because the innovators find the impossibility of putting into execution their crude theories among their white brethren, and more nearly equalized population, they, in

their agony for action, look about for something tangible, something less impossible, and fancy that it is found in the abolition of negro slavery. Alas! for the mistaken folly of those who, in thus acting, act sincerely. Their well-meaning and officious ignorance is pushed on by the powerful lever of fanaticism to ends from which they would shrink in affright could they see them in full development; but which, in half-way execution, they rejoice over, as the poor idiot gazes in delighted wonder and warms his fingers by the blaze which is demolishing his dwelling, fancying the while that he has done a wise thing in the application of the spark which has lighted to their destruction his own and his neighbors’ homes.

Alas for their folly! But woe! woe! a woe of darkness and of death! a woe of hell and perdition to those who, better knowing, goad folly on to such an extreme! This is indeed the sin not to be forgiven; the sin against the Holy Ghost and against the Spirit of God. The beautiful order of Creation, breathed down from Almighty intelligence, is to be moulded and wrought by fanatic intelligence! until dragged down at last to negro intelligence!!

The Almighty has thought well to place certain of his creatures in certain fixed positions in this world of ours, for what cause he has not seen fit to make quite clear to our limited capacities; and why an ass is not a man, or a man an ass, will probably for ever remain a mystery to our limited intellects. One thing, however, he has in his mercy made clear enough, viz., that by no manner of education; no stocks, braces, nor regimental drillings; no problems, theories, nor definitions; neither by steam nor by telegraph—neither by mesmerism nor by chloroform, can our unfortunate brother ass, whether mentally or corporeally, be induced to consider himself as a gentleman, and act accordingly. *He*, at least, is not capable of attaining the *white* civilization of our 19th century. We hope that our philanthropic friends will allow us this. We would fain have some sure ground to stand upon, but do not feel quite certain that they may not come with some new-fangled theory of communism to knock this platform also from under our feet. Believing, however, that (until the spirit of improvement rises a step or two higher) they will allow us our position, we would beg them to instruct us upon what principle of justice this unfortunate brother ass—this hirsute relative—should be so be-devilled and trampled upon. Why should he not lie amidst feathers and velvet, as well as the best in the land. And why, above all, must he help work to make such feathers and velvet comfortable lodgings for his so-called betters!

God given intellect and power to attain, count for nothing in this modern system of arguing. The ass has as good a right to the

possession of intellect as the man; and if God has not given it to him, we must remedy the injustice by some patent "free-and-equal" system. The process is easy enough. If the ass cannot stand on two legs, knock the man down to all fours, (nothing is simpler,) and *vive la fraternité!* Why did not the Almighty save us all this trouble, and make the ass a man, or the man an ass, from the beginning! Truly, 'tis a problem hard to solve, and poor donkey, with his lamentable braying, comes as near an explanation as all our philosophizing can do. God made the world—God gave thee there thy place, my hirsute brother; and according to all earthly probabilities and possibilities, it is thy destiny therein to remain, bray as thou wilt. From the same great power have our sable friends, Messrs. Sambo, Cuffee & Co., received their position also; with which position, allow us to remark, the worthy ancestors of Messrs. Sambo, Cuffee & Co. have continued perfectly satisfied for some four thousand years, (longer, perchance, but records go no farther,) and their descendants would most undoubtedly have so continued; but behold, Satan, as when

"Squat like a toad, close at the ear of Eve,
Assaying by his devilish arts to reach
The organs of her fancy,"

comes now in the likeness of an "all men are born free and equal" advocate, to raise

"Vain hopes, vain aims, inordinate desires,"

in poor Cuffee's hitherto quiet brain! Alas, "my poor black brother!" thou, like the hirsute, must do thy braying in vain. Where God has placed thee, there must thou stay. "You, Quashee, my pumpkin, (not a bad fellow either, this poor Quashee, when tolerably guided,) idle Quashee, I say, you must get the devil sent away from your elbow, my poor dark friend! In this world there will be no existence for you otherwise." To the immortals, perchance, this tempest in a tea-pot, this little hubbub on our little globe, may look trifling enough, they seeing very certainly that at the end of some score of centuries all things will go right again. Quashee will either have gone back to his quiet corner in this world's civilization, or, perchance, have vacated it for ever in favor of some higher claimant. It matters little in all likelihood to the supreme spectators of this world's game, what confusion of checking and check-mating may be going on in our little ant-hill. The thought of God must conquer finally, and the score or so of centuries more or less would be but a moment in its development. But to us, my brothers, and our children these twenty centuries, what are they! White and black, were it not well to think on this a little! Truly to us, my piped brethren of all complexions, this abolitionist Satan is preparing (if so be we chain him not in time) a sorry chase through this world's

existence. Only the hirsute can flourish then; ranging at will through beautiful regions, cast back again to wildness and the desert. There nature's bounty may furnish grass to the hirsute, but, truly, no bread to the piped. Black Quashee cannot understand this; God has not given him the intellect for it; and if we teach him to bray out for liberty, i. e., for idleness, verily it is as easy for him to bray out to that tune, as to any other. But the white man—of what is he dreaming, when he listens even for a moment to such cant! To him God has given intellect (would he but use it!) to see the truth. Brother, (for if acting conscientiously, and no devil's firebrand sent by Satan to our undoing, even as a brother, although differing, we hail thee,) brother, thou speakest, perchance, in ignorance. Hast thou ever lived, alongside of Quashee! noticed his habits, his mind, his character, his tastes, his virtues and his vices! Clothed him in health, and nursed him in sickness! cheered him in merriment, and comforted him in sorrow! rejoiced with him, and suffered with him! laughed with him, and wept with him! Thou *hast not*; but there be those who have; "go thou and do likewise," and when (if ever) thou dost, *thou wilt cease to be an abolitionist*. The white man, whose heart truly warms to the fate of the negro, would cease to agitate this question in that moment that he would become well acquainted with him, for thus would he learn its utter impracticability. At the hideous thought of amalgamation, even the abolitionist white-blood shudders. The white and the black race can only exist together in their present relations. Abolition is the extinction of the one or the other.

"I to herd with narrow foreheads, vacant of our glorious gains,
Like a beast with lower pleasures, like a beast with lower pains!
Mated with a squalid savage—what to me were sun or climate?
/ the hair of all the ages, in the foremost files of time?"

The civilized man must retain his position, or perish.

We beg pardon of Mr. Campbell, however, whom we have, like a garrulous host, kept for a long time, bat in hand, ready to make his bow to the reader, while we, instead of remembering our duty of introducing him, have been proeing away upon his text. Mr. Campbell is, he tells us, a member of the Social Improvement Society of Philadelphia; at divers meetings of which society, "various and talented speakers," (we use Mr. C.'s words,) *white and black*, joined in the discussion of this question: "Can the colored races of men be made mentally, politically and socially equal with the white!" This is a rather startling outset; and judging from the results usually emanating from such particularized associations, our first impulse was to withdraw from Mr. Campbell's extended hand.

Gulping down the doubt, however, we boldly enlist under the motto he adopts—"Prove all things; hold fast that which is good;" and we are rewarded by finding that he honestly and manfully meets the question. Here, then, we have a collection of extracts, selected by a northern man, who has entered freely into the discussion of the subject with minds of all bases,

"Black spirits and white, blue spirits and gray;"

enthusiast and fanatic; whose important scientific authorities are all, without exception, Englishmen or northern United States men. Surely no bias should be here expected in favor of southern United States institutions, and yet a stronger defense of them it would be difficult to find.

In answer to the question, "Can the colored races of men be made mentally, politically, and socially equal with the white?" our author first states the indisputable fact, that never, from the most remote antiquity until now, has there appeared a race of negroes, that is, "men with woolly heads, flat noses, thick and protruding lips, which has ever emerged from a state of savagism or barbarism to even a demi-civilization." "Look to the West Indies, to Brazil, to Australia, to the Gold Coast, to Zanguebar, to Congo, to Senegambia, to Ashantee, nay, to the civilization under his imperial highness Faustin the First, Emperor of Hayti, and answer me, ye Garrison, and Phillipses, and Burleys, and Folsoms, and Smiths, what has this race done in five thousand years?" To those who advance the argument that the negro has never had an opportunity for development, because the white man has always oppressed him, our author says: "They forget that the latter portion of this proposition refutes the former. If the white man has always oppressed the negro, it goes to establish the fact claimed by me, that the white man is mentally superior, because if the white man has been always powerful enough to debar the negro from improving his intellect, it establishes the complete force of my views: 'that no amount of education or training can ever make the negro equal in intellect with the white.' Knowledge is power; and it is evident to all, that under no circumstances has the negro race ever been able to compete with the white." "We see around us in every direction evidences of the fact, that the negro is naturally inferior to the white; but it is unfair to institute comparisons where this race is held in bondage by the white. We will give them all the advantages of a fair examination. We will travel to that quarter of the globe which seems to be the native land of this race, and to which they appear to be indigenous. We will go where the white man has never oppressed them," and what do we find? "Monumental ruins of Dahomey, forty ages do not look

down upon you! Strewn columns of Ashantee, where shall we find you? Echo answers, 'Where?' Decaying towers of Zanguebar, shall any traveller ever discover your nameless and undiscovered and undiscoverable foundations? Sculptured temples of Guinea, what hierologist shall be able to decipher your extinguished hieroglyphics?" "If only one great negro name could be produced to redeem a whole race, then I will retract all I have ever said of negro inferiority; but this one only name, this *rara avis*, this white blackbird, this phoenix, is not forthcoming. 'You cannot make a silk purse out of a sow's lug,' is an old and homely adage, but not the less true; so can you not make any thing from a negro but negroism, which means barbarism and inferiority." "Have the woolly-headed races of men ever produced one, even only one man, famous either as lawgiver, statesman, poet, priest, painter, historian, orator, architect, musician, soldier, sailor, engineer, navigator, astronomer, linguist, mathematician, anatomist, chemist, physician, naturalist, or philosopher?" Not one in the whole expanse of the world's history for 4,000 years; and yet there are men who dare to babble of circumstance, disadvantage, oppression, and universal equality. What might the negro have done, if—and if—and if! What might the jackass have done, if—and if—and if! The proof is as fair in the one case as in the other—the same in kind, differing only in degree. As God made them, so they have been, so they are, and so they will be; the white man, the negro and the jackass, each to his kind, and each to his nature; true to the finger of destiny, (which is the finger of God,) and undeviatingly pursuing the track which that finger as undeviatingly points out. Where rebel reason in its little pride of might would try to change that track, there does the restless vehemence of disorganized nature prove its own avenger. The negro, become master, extinguishes that civilization which his nature abhors, to revel in savagism to which his instincts limit him. Philanthropy, or rather philo-donkeyism, has never yet experimented how the ass would act under similar circumstances; but we are fully authorized from logical induction, to conclude that green grass and the wilderness would be the order of the day under his régime, and humanity, both black and white, would be fairly kicked out of existence. To the white man, then, the philosopher, poet, orator, historian; to him,

"The heir of all the ages, in the foremost files of time,"

it matters little whether donkeyism or negroism predominate; either to him would be extinction.

To return to the question of inferiority of the negro, we have then, in all honest reason-

ing, the full right to deduce it from constant unvarying, and unstruggling inferiority of position; and the observations of naturalists all go to confirm this position by his anatomical inferiority. Mr. Campbell quotes largely to this effect, and gives us extracts even from Dr. Prichard, acknowledging that by a comparison with the highest of the simia, the chimpanzee and the orang, there is apparent in certain parts of the skeleton "an approach towards the forms of these latter species."*

Lawrence, after enumerating the various points of anatomical difference, continues: "In all the particulars just enumerated, the negro structure approximates unequivocally to that of the monkey. It not only differs from the Caucasian model, but is distinguished from it in two respects: the intellectual characters are reduced, the animal features enlarged and exaggerated." Knox, of the dark races generally, remarks: "The whole shape of the skeleton differs from ours; and so also, I find, do the forms of almost every muscle of the body." Of the Hottentots, he says: "Their skeleton presents of course peculiarities; such as the extreme narrowness of the nasal bones, which run into one in early age, not unfrequently as we find in apes. But it is the exterior which is the most striking; and this, no doubt, is wonderful. No one can believe them to be of the same race with ourselves, yet unquestionably they belong to the genus man."

The now exploded assumption that the ancient Egyptians were negroes, is met by Mr. Campbell with such a mass of authorities, that we must refer the reader who is curious on the subject to his book. One can but smile in reading them, at the idea that such an error could ever have obtained credence enough to make it worth combating. "Now that we distinguish the several human races by the bones of the head, (remarks Lawrence,) it is easy to prove that whatever may have been the hue of their (the Egyptians) skin, they belonged to the same race with ourselves;" "that they formed no exception to that cruel law, (a cruel law which God has made) and shall we better it!) which seems to have doomed to eternal inferiority all the tribes of our species which are unfortunate enough to have a depressed and compressed cranium." The great Cuvier had already long before pronounced, that "neither the Gallas, nor the Boesjemen, nor any race of negroes produced that celebrated people;" and Morton† (a name at which we bow our

heads in sorrow, that so early should have been closed a life whose labors science can ill spare) gives a stream of decisive evidence on the subject. A translation of a deed on papyrus of the reign of Ptolemy, Alexander First, giving a description of the persons, parties to a sale of land at Thebes, describes one of them as of a dark complexion, the remaining five as sallow. The Egyptians themselves, on their monuments, have represented the men red, the women yellow; and both with features entirely distinct from the negro, who appears among them with all the characteristic features of his race, and always in a condition of bondage or inferiority. "Negroes (observes Morton) were numerous in Egypt, but their position in ancient times was the same that it now is, that of servants and slaves." "The hair of the Egyptians resembled in texture that of the fairest Europeans of the present day."

Equally futile, and equally rejected by science, is the assumption that climate or habit of life can account for the differences of race. "The physical or organic characters which distinguish the several races of men are as old (says Morton) as the oldest records of our species." We frequently find one race inhabiting an extent of country which serves at once to prove the irrationality of the conclusion, that climate can have had any influence in stamping upon it its characteristic differences. "The flat face of the Chinese (observes Lawrence) not only extends throughout that vast empire, which covers nearly forty degrees of latitude and seventy of longitude; but also over the neighboring regions of central and northern Asia, the north of Europe and of America, over a very large portion of the globe, including every possible variety of heat and cold, elevation and lowness, moisture and dryness, wood, marsh, and plain. That European Creoles in the West India, in America and in the East, have preserved their native features in all instances where no intermixture of blood has occurred, is proved by the uninterrupted experience of the Spaniards, Portuguese and English, who have had foreign colonies in climates most differing from their own, longer than any other nation. The modern Gipseys and the Jews afford examples of peculiar and distinctive casts of countenance being preserved in every climate. Volney has attempted to account for the peculiarities of the negro features in the following whimsical manner. We translate, for the benefit of those to whom the French may not be quite familiar: "I observe that the features of the negro represent precisely the state of contraction which our faces assume when struck by the light and a strong reverberation of heat—then the brow frowns, the ball of the cheek rises, the eyelid contracts, and the mouth draws itself together, (*fait la moue*). Is it not natural that this contraction,

* Our quotations, let it be understood, are henceforward invariably taken at second-hand from Mr. Campbell. It is our object to show what he has done, and to give his book, as far as in our power, the circulation which it so well deserves.

† It is but justice to this distinguished man to remark, that we have ourselves heard Agassiz (himself the greatest of living naturalists) say, that he was an authority inferior to none in ethnology.

which takes place continually in the naked and hot country of the negro, should become the permanent characteristic of his face?" "Unfortunately (answers Lawrence) for these speculations, the negro features occur in numerous tribes spread over a very great extent of country, with various climates, and in many instances where the heat is by no means excessive; the character, too, is permanent after any number of generations, when the negro is taken into other climes." Blumenbach seriously quotes some wiseacre, even more fanciful than Volney, who would fain account for the flat nose and swollen lips, by the fact that the mothers carrying the children on their backs, "in the violent motion required for their hard labor, as in beating and pounding millet, &c., the face of the young one is constantly thumping against the back of the mother." *Povero Bambino!* one would imagine that thumps violent enough to flatten its poor little nose, must keep the juvenile martyr in a state of constant depletion from that important organ. What, moreover, becomes of this theory in a barbarous country like our own, where, when the mother goes to work, the child is, by order of her brutal master, actually taken from her until her labor is done, and consigned to its cradle, or to the arms of a nurse, who holds it in the ordinary fashion for the carrying of such commodities, while basking in the sun or sitting by a comfortable fire, according to circumstances? Farther—to call in science to our aid—"All the peculiarities of the negro cranium (says Lawrence) exist in the fœtus. The prominent jaws, flat nose, and other characteristics are found as strongly marked in the youngest embryo as in the adult. That climate has no transmissible effect on the skin, is evident from the fact that the children of the husbandman, or of the sailor whose countenance bears the marks of other climes, are just as fair as those of the most delicate and pale inhabitants of a city. Nay, the Moors, who have lived for ages under a burning sun, still have white children; and the offspring of Europeans in the Indies have the original tint of their progenitors. On the hypothesis which assigns the varieties of mankind to the operation of climate as their cause, we should expect to find in Africa all tribes under the equator of the most intensely black color; the tinge should become lighter and lighter as we proceed thence towards the south, and the complexion ought to be white when we arrive at regions which enjoy a European climate. Thus, however, is by no means the case. The Abyssinians on the east, with dark olive color and long hair, are placed near the equator, and surrounded by negroes. In the same part, also, the Gallas, a great and barbarous nation, having, according to Bruce, long black hair and white skin, verging to brown, occupy extensive regions under the

equator itself. On the other hand, as we proceed from the equator towards the south, through tribes of negroes, we find the black color continue with undiminished intensity. It is known in the West Indies that the Congo negroes, in the blackness of their skin and woolly hair, equal any tribe of Africans. The Island of Madagascar, which is cooled by the mild breezes of the Indian Ocean, and ought, therefore, to continue a white race, has two kinds of natives: one of olive color with dark hair, the other true negroes. When we consider how large an extent of Africa is occupied by the black woolly-haired negroes, and that these regions vary in their latitude, their elevation, and every other point, that they include sandy deserts, coasts, rivers, hills, valleys, and very great varieties of climate, the conclusion that these adventitious circumstances do not influence the color or other properties of the race, is irresistible." Knox says: "My esteemed friend, Dr. Andrew Smith, informs me that he attentively looked at a family descended from forefathers who came to South Africa with the first settlers. Three hundred years then had elapsed since their first arrival. Their descendants at this moment are as fair as the fairest of Europeans." Cases there are of white families, under similar circumstances, being lost to the whites and only known in their negro descendants; but there is abundant proof that this is the result of constant mingling with negro blood until the white has run out; which the commonest observer knows must be the case where the supply of white blood is not constantly renewed. We in the United States of America, whether north or south, seem to be in little danger of changing our skins; and our children are as fair as their Saxon or Celtic ancestors, although occupying the very grounds on which the red man lived and died, leaving his scattered graves as memorials of ages of possession.

The wool of the negro, another mooted point, our author most satisfactorily settles for us, through the minute and learned argument of P. A. Browne. Most unwillingly do we pass over a discussion showing such close research, and so triumphantly carried through. Our bounds will not, however, allow its insertion, and we can only entreat our readers to study it for themselves. The garbled view which our very limited extracts could give would be doing it injustice. Suffice it to say, that Mr. Browne not only proves his point by producing fact upon fact in a way which it is difficult for a candid mind to oppose, but gives us also an insight of the extremely slovenly and careless manner in which Prichard occasionally pushes forward his positions. The covering of the negro head is most indisputably wool. Hair will not felt, but wool will; and the covering of the negro's head will felt—has been felt." With reference to the

color of the skin, which a few lines back we were discussing. Mr. Browne cites the authority of M. Flourens, an eminent French physiologist, who "found four distinct layers between the cuticle and the cutis;" the second of which, he says, is a mucous membrane, a distinct organized body, underlaying the pigment, and existing in persons of dark color only. M. Flourens sought in vain for this membrane between the cutis and outer lamina of the epidermis of the white man; and yet this is the seat of the discoloration produced in his complexion by exposure to the sun. From these examinations this distinguished naturalist and anatomist was able to pronounce definitely that the discoloration in the skin of the white man is totally different in kind from the cause of blackness in the negro, and therefore justly concludes that the negro and European are separate species of beings."

Have we yet given enough proof of difference of race and negro inferiority? Lawrence remarks, that the difference of color "between the white and the black races is not more striking than the preëminence of the former in moral feelings and in mental endowments." The negroes "indulge almost universally in disgusting debauchery and sensuality, and display gross selfishness, indifference to the pains and pleasures of others; insensibility to beauty of form, order and harmony, and an almost entire want of what we comprehend altogether under the expression of elevated sentiments, manly virtues, and moral feeling. The hideous savages of Van Diemen's Land, of New-Holland, New-Guinea, and some neighboring islands, the negroes of Congo and some other parts, exhibit the most disgusting moral, as well as physical portraits of man." And yet, we repeat with Carlyle, "not a bad fellow either, this poor Quashee, when *tolerably guided*." Guidance, however, he does need. Colonel Charles Hamilton Smith, whose predilections are, as Mr. Campbell remarks, in favor of the oppressed and degraded races, who resided long in the West Indies, and continued for years his investigations on the subject of the races, says of the negroes: "War is a passion that excites in them a brutal disregard of human feelings; it entails the deliberate murder of prisoners, and victims are slain to serve the manes of departed chiefs. Even cannibalism is frequent among tribes of the interior. The perceptive faculties of the children are far from contemptible, bearing good comparison with the white, but they drop behind about the twelfth year, when the reflective powers begin to have the ascendancy," and when the mind of the white is just developing itself. Is this not an approach to the state of the brute, whose mind, or instinct—call it as you will—is certainly, in early infancy, more developed than the human being! A lamb, a calf, or a colt of a day or a week old, shows to much greater

advantage than an infant of the same age. "Collectively (continues Colonel Smith) the untutored negro mind is confiding and single-hearted, naturally kind and hospitable. *Both sexes are easily ruled*, and appreciate what is good, under the guidance of common justice and prudence;" but "they have never comprehended what they have learned, nor retained a civilization taught them by contact with more refined nations, losing it as soon as that contact has ceased. Conquest with them has been confined to kindred tribes, and produced only slaughter. Even Christianity of more than three centuries, in Congo, has scarcely excited a progressive civilization. Thus, even the good qualities given to the negro by the bounty of nature, have seemed only to make him a slave, trodden down by every remorseless foot, and to brand him for ages with the epithet of outcast." "And true it is that the worst slavery is his lot at home, for he is there exposed to the constant peril of becoming also a victim, slaughtered with the most revolting torments. Tyrant of his blood, he traffics in slavery as it were merchandise; makes war purposely to capture neighbors, and sells even his own wives and children."

Is the negro made for slavery? God in heaven! what are we, that because we cannot understand the mystery of this thy will, we should dare rise in rebellion and call it wrong, unjust, and cruel! The kindness of nature fits each creature to fulfil its destiny. The very virtues of the negro fit him for slavery, and his vices cry aloud for the checks of bondage. Would it not be more worthy of thinking men, instead of endeavoring to brand with infamy a system so evidently marked out by the finger of God, rather to combine their efforts to make that system what it should be! Instead of driving the slaveholder, by an interference which puts his property and life in danger, to acts of harshness and restraint entirely unnecessary by the laws of nature, would it not be more wise, more human, and more philanthropic to aid in removing obstacles, to soften difficulties, and thus prevent the abuses of a system which, sanctified by the laws of nature, needs but the fair operation of those laws to be like every other result of God's thought, beautiful in the undeviating order of creation! Beautiful it is in its fulfillment; hideous only in the unnatural struggle which, opposing man's law to God's law, rouses the evil passions of men in a vain effort to correct the works of Omnipotence. But let us sum up this branch of our subject in the words of Dr. T. D. English, from a letter addressed to the author of "Negro-mania:" "The steady advance of the white species meets with no parallel in the black. The latter has proved itself, when left to itself, to be incapable of progress. Even when taught by a superior species, it soon retrogrades to hopeless barbarism. To give it dominance is

to extinguish agriculture, destroy the mechanic arts, and root out science. Such an apparent exception, as may be seen in Liberia, gladly as the philanthropist may hail it, proves only the power given by the infusion of other blood. The mulattoes there, as here, have the most intellectual force. When these wear out, as they will in time, a recurrence to the characteristics of the predominant original race will reproduce barbarism, unless, indeed, this calamity be averted by a renewed amalgamation. Nor do the isolated cases of negro smartness in this country prove any thing more than the value of a Caucasian admixture. Nature has marked, by unerring lines, the distinction between the species, and her tokens cannot be wiped out, by either the sophistry of the negrophilist, or the cant of the fanatic. The manifest moral, intellectual, and physical inferiority of the negro issues from the decree of God, which no efforts of man can either alter or abrogate. Even modification must be but partial at least. It is the destiny of the negro, *if by himself, to be a savage, if by the white, to be a serf.* He may be a savage in name and in fact, as in Africa, or in fact only as in Hayti. He may be a serf in name and in fact, as in the southern states, or in fact only, as in the northern states; but savage or serf he must be. No man who values himself, who has any regard for sound morality, or who feels any desire to see intellectual progress made certain, can join in the absurd attempt to raise the negro to his own level. A movement for such ends is necessarily impotent, and can only result at the best for the negro in the degradation of the white. Kindness to these unfortunate beings is the duty of every man. They may be styled human beings, though of an inherently degraded species. To attempt to relieve them from their natural inferiority is idle in itself, and may be mischievous in its results. Calculated as it is to arouse evil passions, it may one day provoke a necessity not to be contemplated without horror. It may lead to a war between the species, which must result in the extirpation of the negro. True philanthropy—not that sickly sentiment which neglects the interests of the white laborer to cant about the black—but a true and honest regard for the best interests of mankind, will maintain the negro undisturbed in the relation which God has marked out for him." What that relation is, can, we think, be pretty fairly deduced from such testimony as we have here seen advanced. The alternatives are serfdom or savagedom; a state of equality being, we think, honestly proved impossible. The antagonism of races is working itself out in every instance where two races are put in collision by the quicker or slower extinction of the inferior and feebler race. The only exceptions to this rule, which the world has ever seen, are where the beneficent system of serfdom (i. e. slavery) has come to the rescue and protection

of the weaker race; and nowhere has this system been exhibited in more perfection, and freer from the abuses (for every system has its abuses) with which it is stained, than in the negro slavery of our southern states. Knox has shown us everywhere the white blood treading down and exterminating the darker races. "The Saxon (he remarks) will not mingle with any dark race, nor will he allow him to hold an acre of land in the country occupied by him." "Already we have cleared Van Diemen's Land of every human aboriginal; Australia, of course, follows, and New-Zealand next. There is no denying the fact, that the Saxon, call him by what name you will, has a perfect horror for his darker brethren. Hence the folly of the war carried on by the philanthropists of Britain against nature." "The Anglo-Saxon has already cleared out Tasmania. It was a cruel, cold-blooded, heartless deed. Australia is too large to attempt the same plan there; but by shooting the natives as freely as we do crows in other countries, the population must become thin and scarce in time." "It would be revolting (says Col. C. H. Smith, whom we have already quoted as the advocate of the dark races) to believe that the less gifted tribes were predestined to perish beneath the conquering and all-absorbing covetousness of European civilization, without an enormous load of responsibility resting on the perpetrators. Yet this fate appears to be sealed in many quarters, and seems, by a pre-ordained law, to be an effect of more mysterious import than human reason can grasp." Revolting though it may be to our eye, which pierces but the outer thought of creation's plan, if this be really the pre-ordained law of our existence, shall we better matters by struggling against it? One only door seems opened by nature to prevent such a catastrophe, and that is, through the beneficent system of serfdom, or otherwise slavery. The word is of little import: the thing is the same. The negro, docile in subjection, attached like the household dog to his master—only in proportion to his intellect in a far higher grade of being—is satisfied and happy in the half civilized condition, which, with us, his imitateness enables him to attain. Liberated—in other words, unprotected, and starving for want of protection, the dog, as the negro, returns to the untaught habits and instincts of nature. Thievish and wolfish, the dog, poor fellow, is easily disposed of, and a gun or a rope settles the difficulty, as far as he is concerned. The negro is, it seems, according to Mr. Knox, occasionally disposed of by the same summary process. In more civilized communities, where law protects him, he will still, if the black population be comparatively small, dwindle and disappear before the antagonism of race, as we see now in the process of exemplification in our northern states. But where the proportion is in an opposite ratio, the negro, whose in-

dividual is, as a man, protected by the law, becomes soon, in the aggregate, too powerful for the law. Then comes the clash of race, hideously developed in all its horrible proportions. The brutish propensities of the negro now unchecked, there remains no road for their full exercise, (unless the white man voluntarily retreats before him,) but in the slaughter of his white master, and through that slaughter he strides (unless he himself be exterminated) to the full exercise of his native barbarity and savagism. And this, then, is the consummation so devoutly to be wished! Congo civilization! Hottentot civilization!! Haytien civilization!!!

Jamaica is fast treading on the tracks of Hayti. British philanthropy has already succeeded in making the rich lands of that fair isle so utterly valueless, that the white man must soon abandon his right to live in it. And the vast and beautiful territory composing the southern and southwestern states of America; this territory, whose giant youth is governing the world by its vast produce, which holds the reins of Europe, and spins round it, even with the fine web of its cotton fibre, a net-work, the destruction of which is the destruction of civilization—is this country, too, to be abandoned to the desert and the waste, to negroism and barbarity, that abolitionism may chant its *Te Deum* over our ashes!

Abolition is not the abolition of slavery. Equality is no thought nor creation of God. Slavery, under one name or another, will exist as long as man exists; and abolition is a dream whose execution is an impossibility. Intellect is the only divine right. Intellect seeks freedom from its own proper impulses, and attains it by its own proper power. The negro cannot be schooled, nor argued, nor driven into a love of freedom. His intellect cannot grasp it, nor can he love an abstraction, which it is beyond his intellect to understand. The apostle of freedom can to the negro be nothing more than the apostle of temporary license and permanent savagism. "Heaven's laws are not repealable by earth, however earth may try."

We have in our article entirely forgotten the odious plea for amalgamation—a thought from which nature shrinks; but as all points are to be met, we are glad to find it in Mr. Campbell's book most ably discussed by more than one learned author. Knox, over and over again, strongly pronounces against the possible permanent existence of a hybrid race, and as such he unhesitatingly classes all mulattoes. "Nature's laws are stronger than bayonets." "No mixed race will she support." P. A. Browne, whom we have already noticed as so triumphantly meeting Prichard on the question of the woolly head, comes here to our assistance in a manner equally decisive, confuting him from his own words, and proving his utter incapacity for the argument he undertakes. Let

us remark, *en passant*, of Prichard, that he has been hitherto strangely overrated. His ponderous tomes are calculated, from their imposing appearance, and their real merit as a collection of facts, to make a great impression upon that large proportion of readers who read without close observation, and adopt without dispute the conclusions of their author; but we are glad to believe that a more just appreciation is now being formed of his labors. We have seen a notice, among other similar articles, of a review of his works, in the form of a treatise, by Dr. Caldwell (Cincinnati: James,) by which the false positions of Dr. Prichard are said to be ably exposed, and the unphilosophical tendency of his work thoroughly combated. We have not room for the argument of Mr. Browne, but he satisfactorily proves, what many of us know from our own unlearned observation, that no mulatto race is self-perpetuating. They are subject to the law of hybrids, and can only continue to exist so long as they continue to receive supplies from the original races whence they sprang. These ceasing to flow in, with equipoised proportions, the predominating race gains the ascendant. Could we suppose, therefore, the possibility of a general amalgamation of the races, the certain result would be, that as the dark races by far outnumber the white, the white must, by the course of nature, become in time extinct. But such "is not the ultimate issue; no, not that." God has implanted in the white races, for their own preservation and for the perfecting of their high destiny, that strong antagonistic feeling of race, which holds them aloof in their purity. The white and the dark races can never amalgamate. "Nature's laws are stronger than bayonets"—stronger than the full tide of abolition and colonization societies, with all their old women and negro men, Lucretia Motts and Fred. Douglasses to boot. Wilberforce was a good man, no doubt; a well-meaning, sentimentally good man; but all the vice, and all the crimes of all the hardened and ruffianly criminals whom the gallows has disposed of for the last century, could not, if allowed the full scope of their career, have accomplished one tenth of the ill, one shadow of the evil which this same sentimental goodness has occasioned. The first piddles in little murders; the last sweeps away nations. Goodness, which in its well-meaning ignorance assumes an antagonistic position to nature's laws, becomes infinitely mischievous. Those laws, embodying, as they do, the thought of God, must finally prevail; but, alas for the generations upon whose destinies such antagonistic influences act! For them at least the beautiful thought of God, the all-conquering order of nature, becomes a fearful scourge. Placed in antagonism with it, they cannot destroy it; it must destroy them. The thought of God prevails, and generations are swept away. *Depart, ye quack-ridden incompetents!*

"Every one knows (says Blackwood) how easy it is to get up a shout upon any vague pretext of humanity, and how frequently the credulity of the people of England has been imposed on by specious and designing hypocrites. With this set of men Africa has been for many years a pet subject of complaint. They have made the wrongs of the negro a short and profitable cut to fame and fortune, and their spurious philanthropy has never failed to engage the support of a large number of weak, but well-meaning individuals, who are totally ignorant of the real objects which lie at the bottom of the agitations." "An abolition meeting (remarks Mr. Campbell) is held at some town in Ohio, New-York, or Pennsylvania; speeches are made, negro wrongs are dwelt upon, Burns is quoted, 'A man's a man for a' that,' and Terence also, '*Homo sum et nihil a me alienum puto*,' 'My black brother,' and 'All men are born free and equal.' The meeting terminates; an impression is made, and frequently even upon strong minds. There are no libraries within reach; the different authors' works are too expensive, and the abolition poison runs through the mental system, as hydrophobia through the physical, until the patient becomes a rabid, raving fanatic." The author goes on to say that his volume is intended to popularize the subject, and thus to counteract this evil. Most heartily do we wish him success. Full time it is that something were doing, sinking as we are, to use the words of Carlyle, "in deep froth oceans of 'benevolence,' 'fraternity,' 'emancipation-principle,' and 'Christian philanthropy,' and other most amiable-looking, but most baseless, and, in the end, baleful and all-bewildering jargon." "Never till now did the sun look down on such a jumble of human nonsense." "We have a long way to travel back, and terrible flounderings to make, and in fact an immense load of nonsense to dislodge from our poor heads, and manifold cobwebs to rend from our poor eyes, before we get into the road again, and can begin to act as serious men that have work to do in this universe, and no longer as windy sentimentalists, that merely have speeches to deliver, and speeches to write." "Our own white or sallow Ireland, sluttishly starving from age to age on its act of parliament freedom, was hitherto the flower of mismanagement among nations; but what will this be to a negro Ireland, with pumpkins themselves fallen short like potatoes! Imagination cannot fathom such an object; the belly of Chaos never held the like. The human mind in its wide wanderings has not dreamt yet of such a 'freedom' as that will be." "Terrible must be the struggle to return from our delusions, floating rapidly on which, not the West Indies alone, but Europe generally, is nearing the Niagara Falls."

We agree with Mr. Campbell that a full and open discussion on the subject of the races,

is the likeliest mode of warding off the terrible evil which hangs over us. We are hardly sanguine enough to believe with him "that there is a rapid change going on in the public mind of our northern states favorable to negro slavery;" but we do believe that nothing would go farther towards expediting such a change than the bold expression of such fair and honorable views as he has not hesitated to advance. "Let our citizens (he says) understand the real merits of the question at issue, and there is no fear but a healthy tone will be given to public opinion, and that maudlin, silly humanitarianism will give way to true ideas and plain, practical common sense." "It is only necessary to demand discussion—open, fair, and free discussion—to prove to our working citizens the extreme wickedness of freeing the negro under any pretext at all." Fain would we believe this, and from our hearts we thank Mr. Campbell for his manly effort in the true cause of civilization and humanity. It is indeed a noble cause, and high the meed of praise to those who contribute to unmask the hideous form which now, under the assumed name of philanthropy, covering, like the veiled prophet of Khorassan, its fearful loathsomeness with the garb and appurtenances of divinity, claims the worship of the world.

"Not the long-promised light, the brow whose beaming
Was to come forth all-conquering, all-redeeming,
But features horrible than hell's or traced
On its own brood."
"There, ye wise saints, behold your light, your star;
Ye would be dupes and victims, and ye are."

L. S. M.

NEGRO SLAVERY—MEMOIR OF, BY CHANCELLOR HARPER; PREPARED FOR, AND READ BEFORE, THE SOCIETY FOR THE ADVANCEMENT OF LEARNING, OF SOUTH CAROLINA—PART I.—The institution of domestic slavery exists over far the greater portion of the inhabited earth. Until within a very few centuries, it may be said to have existed over the whole earth—at least in all those portions of it which had made any advances toward civilization. We might safely conclude, then, that it is deeply founded in the nature of man and the exigencies of human society. Yet, in the few countries in which it has been abolished—claiming, perhaps justly, to be farthest advanced in civilization and intelligence, but which have had the smallest opportunity of observing its true character and effects—it is denounced as the most intolerable of social and political evils. Its existence, and every hour of its continuance, is regarded as the crime of the communities in which it is found. Even by those in the countries alluded to, who regard it with the most indulgence or the least abhorrence—who attribute no criminality to the present generation, who found it in existence, and have not yet been able to devise the means of abolishing it—it is pronounced a misfortune

and a curse injurious and dangerous always, and which must be finally fatal to the societies which admit it. This is no longer regarded as a subject of argument and investigation. The opinions referred to are assumed as settled, or the truth of them as self-evident. If any voice is raised among ourselves to extenuate or to vindicate, it is unheard. The judgment is made up. We can have no hearing before the tribunal of the civilized world.

Yet, on this very account, it is more important that we, the inhabitants of the slaveholding states of America, insulated as we are by this institution, and cut off, in some degree, from the communion and sympathies of the world by which we are surrounded, or with which we have intercourse, and exposed continually to their animadversions and attacks, should thoroughly understand this subject, and our strength and weakness in relation to it. If it be thus criminal, dangerous and fatal—and if it be possible to devise means of freeing ourselves from it—we ought at once to set about the employing of those means. It would be the most wretched and imbecile fatuity, to shut our eyes to the impending dangers and horrors, and “drive darkling down the current of our fate,” till we are overwhelmed in the final destruction. If we are tyrants—cruel, unjust, oppressive—let us humble ourselves and repent in the sight of Heaven, that the foul stain may be cleansed, and we enabled to stand erect, as having common claims to humanity with our fellow-men.

But if we are nothing of all this; if we commit no injustice or cruelty; if the maintenance of our institutions be essential to our prosperity, our character, our safety, and the safety of all that is dear to us—let us enlighten our minds, and fortify our hearts to defend them.

It is a somewhat singular evidence of the indisposition of the rest of the world to hear anything more on this subject, that perhaps the most profound, original and truly philosophical treatise, which has appeared within the time of my recollection,* seems not to have attracted the slightest attention out of the limits of the slaveholding states themselves. If truth, reason, and conclusive argument, propounded with admirable temper and perfect candor, might be supposed to have an effect on the minds of men, we should think this work would have put an end to agitation on the subject. The author has rendered inappreciable service to the south in enlightening them on the subject of their own institutions, and turning back that monstrous tide of folly and madness, which, if it had rolled on, would have involved his own great state, along with the rest of the slaveholding states,

in a common ruin. But beyond these, he seems to have produced no effect whatever. The denouncers of slavery, with whose productions the press groans, seem to be unaware of his existence—unaware that there is reason to be encountered, or argument to be answered. They assume that the truth is known and settled, and only requires to be enforced by denunciation.

Another vindicator of the south has appeared in an individual who is among those that have done honor to American literature.* With conclusive argument, and great force of expression, he has defended slavery from the charge of injustice or immorality, and shown clearly the unspeakable cruelty and mischief which must result from any scheme of abolition. He does not live among slaveholders, and it cannot be said of him, as of others, that his mind is warped by interest, or his moral sense blunted by habit, and familiarity with abuse. These circumstances, it might be supposed, would have secured him hearing and consideration. He seems to be equally unheeded, and the work of denunciation, disdaining argument, still goes on.

President Dew has shown that the institution of slavery is a principal cause of civilization. Perhaps nothing can be more evident than that it is the sole cause. If any thing can be predicated as universally true of uncultivated man, it is, that he will not labor beyond what is absolutely necessary to maintain his existence. Labor is pain to those who are unaccustomed to it, and the nature of man is averse to pain. Even with all the training, the helps and motives of civilization, we find that this aversion cannot be overcome in many individuals of the most cultivated societies. The coercion of slavery alone is adequate to form man to habits of labor. Without it there can be no accumulation of property, no providence for the future, no taste for comforts or elegancies, which are the characteristics and essentials of civilization. He who has obtained the command of another's labor, first begins to accumulate and provide for the future, and the foundations of civilization are laid. We find confirmed by experience that which is so evident in theory. Since the existence of man upon the earth, with no exception whatever, either of ancient or modern times, every society which has attained civilization has advanced to it through this process.

Will those who regard slavery as immoral, or crime in itself, tell us that man was not intended for civilization, but to roam the earth as a biped brute? That he is not to raise his eyes to heaven, or be conformed in his nobler faculties to the image of his Maker? Or will they say that the Judge of all the earth has done wrong in ordaining the means by which

* President Dew's Review of the Virginia Debates on the subject of Slavery.

* *Pushing on Slavery.*

alone that end can be attained? It is true, that the Creator can make the wickedness as well as the wrath of man to praise him, and bring forth the most benevolent results from the most atrocious actions. But, in such cases, it is the motive of the actor alone which condemns the action. The act itself is good, if it promotes the good purposes of God, and would be approved by him, if that result only were intended. Do they not blaspheme the providence of God who denounce as wickedness and outrage that which is rendered indispensable to his purposes in the government of the world? Or at what stage of the progress of society will they say that slavery ceases to be necessary, and its very existence becomes sin and crime? I am aware that such argument would have little effect on those with whom it would be degrading to contend—who pervert the inspired writings—which, in some parts, expressly sanction slavery, and, throughout, indicate most clearly that it is a civil institution, with which religion has no concern—with a shallowness and presumption not less flagrant and shameless than his, who would justify murder from the text, “and Phineas arose and executed judgment.”

There seems to be something in this subject which blunts the perceptions and darkens and confuses the understandings and moral feelings of men. Tell them that, of necessity, in every civilized society, there must be an infinite variety of conditions and employments, from the most eminent and intellectual to the most servile and laborious; that the negro race, from their temperament and capacity, are peculiarly suited to the situation which they occupy, and not less happy in it than any other corresponding class to be found in the world; prove, incontestably, that no scheme of emancipation could be carried into effect without the most intolerable mischiefs and calamities to both master and slave, or without probably throwing a large and fertile portion of the earth's surface out of the pale of civilization—and you have done nothing. They reply, that whatever may be the consequence, you are bound to do *right*; that man has a right to himself, and man cannot have a property in man; that if the negro race be naturally inferior in mind and character, they are not less entitled to the right of humanity; that if they are happy in their condition, it affords but the stronger evidence of their degradation, and renders them, still more, objects of commiseration. They repeat, as the fundamental maxim of our civil policy, that all men are born free and equal, and quote from our Declaration of Independence, “that men are endowed by their Creator with certain inalienable *rights*, among which are life, liberty, and the pursuit of happiness.”

It is not the first time that I have had occasion to observe that men may repeat, with the utmost confidence, some maxim or senti-

mental phrase as self-evident or admitted truth, which is either palpably false, or to which, upon examination, it will be found they attach no definite idea. Notwithstanding our respect for the important document which declared our independence, yet, if any thing be found in it—and especially in what may be regarded rather as its ornament than its substance—false, sophistical or unmeaning, that respect should not screen it from the freest examination.

All men are born free and equal. Is it not palpably, nearer the truth to say, that no man was ever born free, and that no two men were ever born equal? Man is born in a state of the most helpless dependence on others. He continues subject to the most absolute control of others, and remains without many of the civil, and all of the political, privileges of his society, until the period which the laws have fixed, as that at which he is supposed to attain the maturity of his faculties. Then inequality is further developed, and becomes infinite in every society, and under whatever form of government. Wealth and poverty, fame or obscurity, strength or weakness, knowledge or ignorance, ease or labor, power or subjection, make the endless diversity in the condition of men.

But we have not arrived at the profundity of the maxim. This inequality is, in a great measure, the result of abuses in the institutions of society. They do not speak of what exists, but of what ought to exist. Every one should be left at liberty to obtain all the advantages of society which he can compass by the free exertion of his faculties, unimpeded by civil restraints. It may be said, that this would not remedy the evils of society which are complained of. The inequalities to which I have referred, with the misery resulting from them, would exist, in fact, under the freest and most popular form of government that man could devise. But what is the foundation of the bold dogma so confidently announced? Females are human and rational beings. They may be found of better faculties, and better qualified to exercise political privileges, and to attain the distinctions of society, than many men; yet who complains of the order of society by which they are excluded from them? For, I do not speak of the few who would desecrate them; do violence to the nature which their Creator has impressed upon them; drag them from the position which they necessarily occupy for the existence of civilized society, and in which they constitute its blessing and ornament—the only position which they have ever occupied in any human society—to place them in a situation in which they would be alike miserable and degraded. Low as we descend in combating the theories of presumptuous dogmatists, it cannot be necessary to stoop to this. A youth of eighteen may have powers

which cast into the shade those of any of his more advanced contemporaries. He may be capable of serving or saving his country, and if not permitted to do so now, the occasion may have been lost for ever. But he can exercise no political privilege, or aspire to any political distinction. It is said that, of necessity, society must exclude from some civil and political privileges those who are unfitted to exercise them by infirmity, unsuitableness of character, or defect of discretion; that, of necessity, there must be some general rule on the subject, and that any rule which can be devised will operate with hardship and injustice on individuals. This is all that can be said, and all that need be said. It is saying, in other words, that the privileges in question are no matter of natural right, but to be settled by convention, as the good and safety of society may require. If society should disfranchise individuals convicted of infamous crimes, would this be an invasion of natural right? Yet this would not be justified on the score of their moral guilt, but that the good of society required, or would be promoted by it. We admit the existence of a moral law, binding on societies as on individuals. Society must act in good faith. No man, or body of men, has a right to inflict pain or privation on others, unless with a view, after full and impartial deliberation, to prevent a greater evil. If this deliberation be bad, and the decision made in good faith, there can be no imputation of moral guilt. Has any politician contended that the very existence of governments in which there are orders privileged by law, constitutes a violation of morality; that their continuance is a crime, which men are bound to put an end to, without any consideration of the good or evil to result from the change? Yet this is the natural inference from the dogma of the natural equality of men as applied to our institution of slavery—an equality not to be invaded without injustice and wrong, and requiring to be restored instantly, unqualifiedly, and without reference to consequences.

This is sufficiently common-place, but we are sometimes driven to common-place. It is no less a false and shallow than a presumptuous philosophy, which theorizes on the affairs of men as of a problem to be solved by some unerring rule of human reason, without reference to the designs of a superior Intelligence, so far as he has been pleased to indicate them, in their creation and destiny. Man is born to subjection. Not only during infancy is he dependant and under the control of others; at all ages, it is the very bias of his nature, that the strong and wise should control the weak and ignorant. So it has been since the days of Nimrod. The existence of some form of slavery in all ages and countries, is proof enough of this. He is born to subjection as he is born in sin and ignorance. To make any considerable progress

in knowledge, the continued efforts of successive generations, and the diligent training and unwearied exertions of the individual are requisite. To make progress in moral virtue, not less time and effort, aided by superior help, are necessary; and it is only by the matured exercise of his knowledge and his virtue, that he can attain to civil freedom. Of all things, the existence of civil liberty is most the result of artificial institution. The proclivity of the natural man is to domineer or to be subservient. A noble result, indeed; but, in the attaining of which, as in the instances of knowledge and virtue, the Creator, for his own purposes, has set a limit, beyond which we cannot go.

But he who is most advanced in knowledge, is most sensible of his own ignorance, and how much must for ever be unknown to man in his present condition. As I have heard it expressed, the further you extend the circle of light, the wider is the horizon of darkness. He who has made the greatest progress in moral purity, is most sensible of the depravity, not only of the world around him, but of his own heart, and the imperfection of his best motives; and this he knows that men must feel and lament, so long as they continue men. So, when the greatest progress in civil liberty has been made, the enlightened lover of liberty will know that there must remain much inequality, much injustice, much slavery, which no human wisdom or virtue will ever be able wholly to prevent or redress. As I have before had the honor to say to this Society, the condition of our whole existence is but to struggle with evils—to compare them—to choose between them—and, so far as we can, to mitigate them. To say there is evil in any institution, is only to say that it is human.

And can we doubt but that this long discipline and laborious process, by which men are required to work out the elevation and improvement of their individual nature and their social condition, is imposed for a great and benevolent end? Our faculties are not adequate to the solution of the mystery, why it should be so; but the truth is clear, that the world was not intended for the seat of universal knowledge or goodness, or happiness, or freedom.

Man has been endowed by his Creator with certain inalienable rights, among which are life, liberty, and the pursuit of happiness. What is meant by the inalienable right of liberty? Has any one who has used the words ever asked himself this question? Does it mean that a man has no right to alienate his own liberty—to sell himself and his posterity for slaves? This would seem to be the more obvious meaning. When the word *right* is used, it has reference to some law which sanctions it, and would be violated by its invasion; it must refer either to the general

law of morality or the law of the country—the law of God or the law of man. If the law of any country permitted it, it would of course be absurd to say that the law of that country was violated by such alienation. If it have any meaning in this respect, it must mean that, though the law of the country permitted it, the man would be guilty of an immoral act who should thus alienate his liberty. A fit question for schoolmen to discuss, and the consequences resulting from its decision as important as from any of theirs. Yet, who will say that the man, pressed by famine and in the prospect of death, would be criminal for such an act? Self-preservation, as is truly said, is the first law of nature. High and peculiar characters, by elaborate cultivation, may be taught to prefer death to slavery, but it would be folly to prescribe this as a duty to the mass of mankind.

If any rational meaning can be attributed to the sentence I have quoted, it is this: that the society, or the individuals who exercise the powers of government, are guilty of a violation of the law of God or of morality, when, by any law or public act, they deprive men of life or liberty, or restrain them in the pursuit of happiness. Yet every government does, and of necessity must, deprive men of life and liberty for offenses against society. Restrain them in the pursuit of happiness! Why, all the laws of society are intended for nothing else but to restrain men from the pursuit of happiness, according to their own ideas of happiness or advantage—which the phrase must mean if it means anything. And by what right does society punish by the loss of life or liberty? Not on account of the moral guilt of the criminal—not by insipidly and arrogantly assuming the prerogative of the Almighty, to dispense justice or suffering, according to moral desert. It is for its own protection—it is the right of self-defense. If there existed the blackest moral turpitude, which, by its example or consequences, could be of no evil to society, government would have nothing to do with that. If an action, the most harmless in its moral character, could be dangerous to the security of society, society would have the perfect right to punish it. If the possession of a black skin would be otherwise dangerous to society, society has the same right to protect itself, by disfranchising the possessor of civil privileges, and to continue the disability to his posterity, if the same danger would be incurred by its removal. Society inflicts these forfeitures for the security of the lives of its members; it inflicts them for the security of their property, the great essential of civilization; it inflicts them, also, for the protection of its political institutions—the forcible attempt to overturn which, has always been justly regarded as the greatest crime; and who has questioned its right so to inflict! “Man cannot have prop-

erty in man”—a phrase as full of meaning as, “who slays fat oxen, should himself be fat.” Certainly he may, if the laws of society allow it; and, if it be on sufficient grounds, neither he nor society do wrong.

And is it by this—as we must call it, however recommended to our higher feelings by its associations—well sounding, but unmeaning verbiage of natural equality and inalienable rights, that our lives are to be put in jeopardy, our property destroyed, and our political institutions overturned or endangered? If a people had on its borders a tribe of barbarians, whom no treaties or faith could bind, and by whose attacks they were constantly endangered, against whom they could devise no security, but that they should be exterminated and enslaved—would they not have the right to enslave them, and keep them in slavery so long as the same danger would be incurred by their manumission? If a civilized man and a savage were by chance placed together on a desolate island, and the former, by the superior power of civilization, could reduce the latter to subjection, would he not have the same right? Would this not be the strictest self-defense? I do not now consider how far we can make out a similar case to justify our enslaving the negroes. I speak to those who contend for inalienable rights, and that the existence of slavery, always, and under all circumstances, involves injustice and crime.

As I have said, we acknowledge the existence of a moral law. It is not necessary for us to resort to the theory which resolves all right into force. The existence of such a law is imprinted on the hearts of all human beings. But, though its existence be acknowledged, the mind of man has hitherto been tasked in vain to discover an unerring standard of morality. It is a common and undoubted maxim of morality, that you shall not do evil that good may come. You shall not do injustice or commit an invasion of the rights of others, for the sake of a greater ulterior good. But what is injustice, and what are the rights of others? And why are we not to commit the one or invade the others? It is because it inflicts pain or suffering, present or prospective, or cuts them off from enjoyment which they might otherwise attain. The Creator has sufficiently revealed to us that *happiness* is the great end of existence—the sole object of all animated and sentient beings. To this he has directed their aspirations and efforts, and we feel that we thwart his benevolent purposes when we destroy or impede that happiness. This is the only *natural* right of man. All other rights result from the conventions of society, and these, to be sure, we are not to invade, whatever good may appear to us likely to follow. Yet are we in no instance to inflict pain or suffering, or disturb enjoyment, for

the sake of producing a greater good! Is the madman not to be restrained who would bring destruction on himself or others! Is pain not to be inflicted on the child, when it is the only means by which he can be effectually instructed to provide for his own future happiness! Is the surgeon guilty of wrong who amputates a limb to preserve life! Is it not the object of all penal legislation, to inflict suffering for the sake of greater good to be secured to society!

By what, right is it that man exercises dominion over the beasts of the field; subdues them to painful labor, or deprives them of life for his sustenance or enjoyment! They are not rational beings. No, but they are the creatures of God, sentient beings, capable of suffering and enjoyment, and entitled to enjoy according to the measure of their capacities. Does not the voice of nature inform every one that he is guilty of wrong when he inflicts on them pain without necessity or object! If their existence be limited to the present life, it affords the stronger argument for affording them the brief enjoyment of which it is capable. It is because the greater good is effected, not only to man but to the inferior animals themselves. The care of man gives the boon of existence to myriads who would never otherwise have enjoyed it, and the enjoyment of their existence is better provided for while it lasts. It belongs to the being of superior faculties to judge of the relations which shall subsist between himself and the inferior animals, and the use he shall make of them; and he may justly consider himself, who has the greater capacity of enjoyment, in the first instance. Yet he must do this conscientiously; and, no doubt, moral guilt has been incurred by the infliction of pain on these animals, with no adequate benefit to be expected. I do no disparagement to the dignity of human nature, even in its humblest form, when I say, that on the very same foundation, with the difference only of circumstance and degree, rests the right of civilized and cultivated man over the savage and ignorant. It is the order of nature and of God, that the being of superior faculties and knowledge, and therefore of superior power, should control and dispose of those who are inferior. It is as much in the order of nature, that men should enslave each other, as that other animals should prey upon each other. I admit that he does this under the highest moral responsibility, and is most guilty if he wantonly inflicts misery or privation on beings more capable of enjoyment or of suffering than brutes, without necessity or any view to the greater good which is to result. If we conceive of society existing without government, and that one man, by his superior strength, courage or wisdom, could obtain the mastery of his fellows, he would have a perfect right to do so. He would be morally

responsible for the use of his power, and guilty if he failed to direct them so as to promote their happiness as well as his own. Moralists have denounced the injustice and cruelty which have been practised toward our aboriginal Indians, by which they have been driven from their native seats and exterminated, and no doubt with much justice. No doubt much fraud and injustice has been practised, in the circumstances and the manner of their removal. Yet who has contended that civilized man had no moral right to possess himself of the country! That he was bound to leave this wide and fertile continent, which is capable of sustaining uncouth myriads of a civilized race, to a few roving and ignorant barbarians! Yet if any thing is certain, it is certain that there were no means by which he could possess the country, without exterminating or enslaving them. Savage and civilized man cannot live together, and the savage can only be tamed by being enslaved or by having slaves. By enslaving, alone, could he have preserved them.* And who shall take upon himself to decide that the more benevolent course, and the one more pleasing to God, was pursued toward them, or that it would not have been better that they had been enslaved generally, as they were in particular instances! It is a refined philosophy, and utterly false in its application to general nature or to the mass of human kind, which teaches that existence is not the greatest of boons, and worthy of being preserved even under the most adverse circumstances. The strongest instinct of all animated beings sufficiently proclaims this. When the last red man shall have vanished from our forests, the sole remaining traces of his blood will be found among our enslaved population.† The African slave-trade has given, and will give, the boon of existence to millions and millions in our country, who would, otherwise, never have enjoyed it, and the enjoyment of their existence is better provided for while it lasts. Or if, for the rights of man over inferior animals, we are referred to Revelation, which pronounces—"Ye shall have dominion over the beasts of the field, and over the fowls of the air," we refer to the same, which declares not less explicitly—

"Both the bondmen and bondmaids which thou shalt have, shall be of the heathen that are among you. Of them shall you buy bondmen and bondmaids."

"Moreover, of the children of strangers that do sojourn among you, of them shall ye buy, and of their families that are with you, which they begot in your land, and they shall be your possession. And ye shall

* I refer to President Dew on this subject.

† It is not uncommon, especially in Charleston, to see slaves, after many descents, and having mingled their blood with the Africans, possessing Indian hair and features.

leave them as an inheritance for your children after you, to inherit them by possession. They shall be your bondmen for ever."

In moral investigations, ambiguity is often occasioned by confounding the intrinsic nature of an action, as determined by its consequence, with the motives of the actor, involving moral guilt or innocence. If poison be given with a view to destroy another, and it cures him of disease, the poisoner is guilty, but the act is beneficent in its results. If medicine be given with a view to heal, and it happens to kill, he who administered it is innocent, but the act is a noxious one. If they who began and prosecuted the slave-trade, practised horrible cruelties and inflicted much suffering—as no doubt they did, though these have been much exaggerated—for merely selfish purposes, and with no view to future good, they were morally most guilty. So far as unnecessary cruelty was practised, the motive and the act were alike bad. But if we could be sure that the entire effect of the trade has been to produce more happiness than would otherwise have existed, we must pronounce it good, and that it has happened in the ordering of God's providence, to whom evil cannot be imputed. Moral guilt has not been imputed to *Las Casas*, and if the importation of African slaves into America had the effect of preventing more suffering than it inflicted, it was good both in the motive and the result. I freely admit, that it is hardly possible to justify, morally, those who began and carried on the slave-trade. No speculation of future good to be brought about could compensate the enormous amount of evil it occasioned.

If we could refer to the common moral sense of mankind, as determined by their conduct in all ages and countries, for a standard of morality, it would seem to be in favor of slavery. The will of God, as determined by utility, would be an infallible standard, if we had an unerring measure of utility. The utilitarian philosophy, as it is commonly understood, referring only to the animal wants and employments and physical condition of man, is utterly false and degrading. If a sufficiently extended definition be given to utility, so as to include every thing that may be a source of enjoyment or suffering, it is, for the most part, useless. How can you compare the pleasures resulting from the exercise of the understanding, the taste and the imagination, with the animal enjoyments of the senses—the gratification derived from a fine poem, with that from a rich banquet? How are we to weigh the pains and enjoyments of one man, highly cultivated and of great sensibility, against those of many men of blunter capacity for enjoyment or suffering? And if we could determine, with certainty, in what utility consists, we are so short-sighted with respect to consequences—the remote results

of our best considered actions are so often wide of our anticipations, or contrary to them—that we should still be very much in the dark. But, though we cannot arrive at absolute certainty with respect to the utility of actions, it is always fairly matter of argument. Though an imperfect standard, it is the best we have, and perhaps the Creator did not intend that we should arrive at perfect certainty with regard to the morality of many actions. If, after the most careful examination of consequences that we are able to make, with due distrust of ourselves, we impartially, and in good faith, decide for that which appears likely to produce the greatest good, we are free from moral guilt. And I would impress most earnestly, that with our imperfect and limited faculties, and short-sighted as we are to the future, we can rarely, very rarely indeed, be justified in producing considerable present evil or suffering, in the expectation of remote future good—if, indeed, this can ever be justified.

In considering this subject, I shall not regard it, in the first instance, in reference to the present position of the slaveholding states, or the difficulties which lie in the way of their emancipating their slaves, but as a naked, abstract question—whether it is better that the institution of predial and domestic slavery should, or should not, exist in civilized society. And though some of my remarks may seem to have such a tendency, let me not be understood as taking upon myself to determine that it is better it should exist. God forbid that the responsibility of deciding such a question should ever be thrown on me or my countrymen. But this I will say, and not without confidence, that it is in the power of no human intellect to establish the contrary proposition—that it is better it should not exist. This is probably known but to one Being, and concealed from human sagacity.

There have existed in various ages, and we now see existing in the world, people in every stage of civilization, from the most barbarous to the most refined. Man, as I have said, is not born to civilization. He is born rude and ignorant. But it will be, I suppose, admitted, that it is the design of the Creator that he should attain to civilization; that religion should be known, that the comforts and elegancies of life should be enjoyed, that letters and arts should be cultivated; in short, that there should be the greatest possible development of moral and intellectual excellence. It can hardly be necessary to say any thing of those who have extolled the superior virtues and enjoyments of savage life—a life of physical wants and sufferings, of continual insecurity, of furious passions and depraved vices. Those who have praised savage life, are those who have known nothing of it, or who have become savages themselves. But, as I have said, so far as reason or universal

experiences instruct us, the institution of slavery is an essential process in emerging from savage life. It must then produce good, and promote the designs of the Creator.

SLAVERY ANTICIPATES THE BENEFITS OF CIVILIZATION AND RETARDS ITS EVILS; STRUGGLES OF SOCIETY AND THE COMPETITION OF INTERESTS; POOR LAWN CONTRASTED WITH THE RELATION OF MASTER AND SLAVE.—PART II.—I add, further, *that slavery anticipates the benefits of civilization, and retards the evils of civilization.* The former part of this proposition has been so fully established by a writer of great power of thought—though I fear his practical conclusions will be found of little value—that it is hardly necessary to urge it.* Property—the accumulation of capital, as it is commonly called—is the first elementary civilization. But to accumulate or to use capital to any considerable extent, the combination of labor is necessary. In early stages of society, when people are thinly scattered over an extensive territory, the labor necessary to extensive works cannot be commanded. Men are independent of each other. Having the command of abundance of land, no one will submit to be employed in the service of his neighbor. No one, therefore, can employ more capital than he can use with his own hands, or those of his family, nor have an income much beyond the necessities of life. There can, therefore, be little leisure for intellectual pursuits, or means of acquiring the comforts or elegancies of life. It is hardly necessary to say, however, that if a man has the command of slaves, he may combine labor and use capital to any required extent, and therefore accumulate wealth. He shows that no colonies have been successfully planted without some sort of slavery. So we find the fact to be. It is only in the slaveholding states of our confederacy that wealth can be acquired by agriculture, which is the general employment of our whole country. Among us, we know there is no one, however humble his beginning, who, with persevering industry, intelligence, and orderly and virtuous habits, may not attain to considerable opulence. So far as wealth has been accumulated in the states which do not possess slaves, it has been in cities, by the pursuits of commerce; or, lately, by manufactures. But the products of slave labor furnish more than two thirds of the materials of our foreign commerce, which the industry of those states is employed in transporting and exchanging; and among the slaveholding states is to be found the great market

for all the productions of their industry, of whatever kind. The prosperity of those states, therefore, and the civilization of their cities, have been, for the most part, created by the existence of slavery. Even in the cities, but for a class of population which our institutions have marked as servile, it would be scarcely possible to preserve the ordinary habitudes of civilized life by commanding the necessary menial and domestic service.

Every stage of human society, from the most barbarous to the most refined, has its own peculiar evils to mark it as the condition of morality; and perhaps there is none but Omnipotence who can say in which the scale of good or evil most preponderates. We need say nothing of the evils of savage life. There is a state of society, elevated somewhat above it, which is to be found in some of the more thinly populated portions of our own country—the rudest agricultural state—which is thus characterized by the author to whom I have referred: "The American of the backwoods has often been described to the English as grossly ignorant, dirty, unsocial, delighting in rum and tobacco, attached to nothing but his rifle, adventurous, restless, more than half savage. Deprived of social enjoyments or excitements, he has recourse to those of savage life, and becomes (for in this respect the Americans degenerate) unfit for society." This is no very inviting picture, which, though exaggerated, we know not to be without likeness. The evils of such a state, I suppose, will hardly be thought compensated by unbounded freedom, perfect equality, and ample means of subsistence.

But let us take another stage in the progress—which, to many, will appear to offer all that is desirable in existence—and realize another Utopia. Let us suppose a state of society in which all shall have property, and there shall be no great inequality of property; in which society shall be so much condensed as to afford the means of social intercourse, without being crowded, so as to create difficulty in obtaining the means of subsistence; in which every family that chooses may have as much land as will employ its own hands, while others may employ their industry in forming such products as it may be desirable to exchange with them. Schools are generally established, and the rudiments of education universally diffused. Religion is taught, and every village has its church, neat, though humble, lifting its spire to heaven. Here is a situation apparently the most favorable to happiness. I say *apparently*, for the greatest source of human misery is not in external circumstances, but in men themselves—in their depraved inclinations, their wayward passions and perverse wills. Here is room for all the petty competition, the envy, hatred, malice, and dissimulation that torture the heart in what may be supposed

* The author of "England and America." We do, however, most indignantly repudiate his conclusion—that we are bound to submit to a tariff of protection, as an expedient for retaining our slaves: "The force of the whole Union being required to preserve slavery—to keep down the slaves."

the most sophisticated states of society, and, though less marked and offensive, there may be much of the licentiousness.

But, apart from this, in such a condition of society, if there is little suffering, there is little high enjoyment. The even flow of life forbids the high excitement which is necessary for it. If there is little vice, there is little place for the eminent virtues which employ themselves in controlling the disorders and remedying the evils of society, which, like war and revolution, call forth the highest powers of man, whether for good or for evil. If there is little misery, there is little room for benevolence. Useful public institutions we may suppose to be created, but not such as are merely ornamental. Elegant arts can be little cultivated, for there are no means to reward the artists nor the higher literature, for no one will have leisure or means to cultivate it for its own sake. Those who acquire what may be called liberal education, will do so in order to employ it as the means of their own subsistence or advancement in a profession, and literature itself will partake of the sordidness of trade. In short, it is plain that, in such a state of society, the moral and intellectual faculties cannot be cultivated to their highest perfection.

But, whether that which I have described be the most desirable state of society or no, it is certain that it cannot continue. Mutation and progress is the condition of human affairs. Though retarded for a time by extraneous or accidental circumstances, the wheel must roll on. The tendency of population is to become crowded, increasing the difficulty of obtaining subsistence. There will be some without any property except the capacity for labor. This they must sell to those who have the means of employing them, thereby swelling the amount of their capital and increasing inequality. The process still goes on. The number of laborers increases, until there is a difficulty in obtaining employment. The competition is established. The remuneration of the laborer becomes gradually less and less; a larger and larger proportion of the product of his labor goes to swell the fortune of the capitalist; inequality becomes still greater and more invidious, until the process ends in the establishment of such a state of things as the same author describes as now existing in England. After a most imposing picture of her greatness and resources; of her superabounding capital and all-pervading industry and enterprise; of her public institutions for purposes of art, learning, and benevolence; her public improvements, by which intercourse is facilitated and the convenience of man subverted; the conveniences and luxuries of life enjoyed by those who are in possession of fortune or have profitable employments; of all, in short, that places her at the head of modern civilization, she proceeds to give the reverse of the picture.

And here I shall use his own words: "The laboring class compose the bulk of the people; the great body of the people; the vast majority of the people. These are the terms by which English writers and speakers usually describe those whose only property is their labor."

"Of comprehensive words, the two most frequently used in English politics are distress and pauperism. After these, of expressions applied to the state of the poor, the most common are vice and misery, wretchedness, sufferings, ignorance, degradation, discontent, depravity, drunkenness, and the increase of crime, with many more of a like nature."

He goes on to give the details of this inequality and wretchedness, in terms calculated to sicken and appal one to whom the picture is new. That he has painted strongly we may suppose; but there is ample corroborating testimony, if such were needed, that the representation is substantially just. Where so much misery exists, there must, of course, be much discontent, and many have been disposed to trace the sources of the former in vicious legislation, or the structure of government; and the author gives the various schemes, sometimes contradictory, sometimes ludicrous, which projectors have devised as a remedy for all this evil to which flesh is heir. That ill-judged legislation may have sometimes aggravated the general suffering, or that its extremity may be mitigated by the well-directed efforts of the wise and virtuous, there can be no doubt. One purpose for which it has been permitted to exist is, that it may call forth such efforts and awaken powers and virtues which would otherwise have slumbered for want of object. But remedy there is none, unless it be to abandon their civilization. This inequality, this vice, this misery, this *slavery*, is the price of England's civilization. They suffer the lot of humanity. But perhaps we may be permitted humbly to hope that, great, intense, and widely spread as this misery undoubtedly is in reality, it may yet be less so than in appearance. We can estimate but very, very imperfectly the good and evil of individual condition, as of different states of society. Some unexpected solace arises to animate the severest calamity. Wonderful is the power of custom in making the hardest condition tolerable; the most generally wretched life has circumstances of mitigation and moments of vivid enjoyment, of which the more seemingly happy can scarcely conceive; though the lives of individuals be shortened, the aggregate of existence is increased; even the various forms of death, accelerated by want, familiarized to the contemplation, like death to the soldier on the field of battle, may become scarcely more formidable than what we are accustomed to regard as nature's ordinary outlets of existence. If we could perfectly analyze the enjoyments and sufferings of the most happy and the most

miserable man, we should, perhaps, be startled to find the difference so much less than our previous impressions had led us to conceive. But it is not for us to assume the province of Omniscience. The particular theory of the author quoted seems to be founded on an assumption of this sort—that there is a certain stage in the progress when there is a certain balance between the demand for labor and the supply of it, which is more desirable than any other—when the territory is so thickly peopled that all cannot own land and cultivate the soil for themselves, but a portion will be compelled to sell their labor to others, still leaving, however, the wages of labor high and the laborer independent. It is plain, however, that this would, in like manner, partake of the good and the evil of other states of society. There would be less of equality and less rudeness than in the early stages; less civilization and less suffering than in the later.

It is the competition for employment, which is the source of this misery of society, that gives rise to all excellence in art and knowledge. When the demand for labor exceeds the supply, the services of the most ordinarily qualified laborer will be eagerly retained. When the supply begins to exceed, and competition is established, higher and higher qualifications will be required, until, at length, when it becomes very intense, none but the most consummately skilful can be sure to be employed. Nothing but necessity can drive men to the exertions which are necessary so to qualify themselves. But it is not in arts, merely mechanical alone, that this superior excellence will be required. It will be extended to every intellectual employment; and, though this may not be the effect in the instance of every individual, yet it will fix the habits and character of the society, and prescribe, everywhere, and in every department, the highest possible standard of attainment.

But how is it that the existence of slavery, as with us, will retard the evils of civilization? Very obviously. It is the intense competition of civilized life that gives rise to the excessive cheapness of labor; and the excessive cheapness of labor is the cause of the evils in question. Slave labor can never be so cheap as what is called free labor. Political economists have established as the natural standard of wages, in a fully peopled country, the value of the laborer's subsistence. I shall not stop to inquire into the precise truth of this proposition. It certainly approximates the truth. Where competition is intense, men will labor for a bare subsistence, and less than a competent subsistence. The employer of free laborers obtains their services during the time of their health and vigor, without the charge of rearing them from infancy, or supporting them in sickness or old age. This charge is imposed on the employer of slave labor, who, therefore, pays higher wages, and cuts off the

principal source of misery—the wants and sufferings of infancy, sickness, and old age. Laborers, too, will be less skilful and perform less work—enhancing the price of that sort of labor. The poor laws of England are an attempt, but an awkward and empiric attempt, to supply the place of that which we should suppose the feelings of every human heart would declare to be a natural obligation—that he who has received the benefit of the laborer's services during his health and vigor, should maintain him when he becomes unable to provide for his own support. They answer their purpose, however, very imperfectly, and are unjustly and unequally imposed. There is no attempt to apportion the burden according to the benefit received; and, perhaps, there could be none. This is one of the evils of their condition.

In periods of commercial revulsion and distress, like the present, the distress, in countries of free labor, falls principally on the laborers. In those of slave labor, it falls almost exclusively on the employer. In the former, when a business becomes unprofitable, the employer dismisses his laborers, or lowers their wages. But with us it is the very period at which we are least able to dismiss our laborers; and if we would not suffer a further loss, we cannot reduce their wages. To receive the benefit of the services of which they are capable, we must provide for maintaining their health and vigor. In point of fact, we know that this is accounted among the necessary expenses of management. If the income of every planter of the southern states were permanently reduced one half, or even much more than that, it would not take one jot from the support and comforts of the slaves. And this can never be materially altered until they shall become so unprofitable that slavery must be of necessity abandoned. It is probable that the accumulation of individual wealth will never be carried to quite so great an extent in a slaveholding country as in one of free labor; but a consequence will be that there will be less inequality and less suffering.

Servitude is the condition of civilization. It was decreed when the command was given, "Be fruitful, and multiply, and replenish the earth, and subdue it," and when it was added, "In the sweat of thy face shalt thou eat bread." And what human being shall arrogate to himself the authority to pronounce that our form of it is worse in itself, or more displeasing to God, than that which exists elsewhere? Shall it be said that the servitude of other countries grows out of the exigency of their circumstances, and therefore society is not responsible for it? But if we know that in the progress of things it is to come, would it not seem the part of wisdom and foresight to make provision for it, and thereby, if we can, mitigate the severity of its evils? But the fact is not so. Let any one who doubts read the

book to which I have several times referred, and he may be satisfied that it was forced upon us by the extremest exigency of circumstances, in a struggle for very existence. Without it, it is doubtful whether a white man would be now existing on this continent—certain, that if there were, they would be in a state of the utmost destitution, weakness, and misery. It was forced on us by necessity, and further fastened upon us by the superior authority of the mother country. I, for one, neither deprecate nor resent the gift. Nor did we institute slavery. The Africans brought to us had been—speaking in the general—slaves in their own country, and only underwent a change of masters. In the countries of Europe and the states of our confederacy, in which slavery has ceased to exist, it was abolished by positive legislation. If the order of nature has been departed from, and a forced and artificial state of things introduced, it has been, as the experience of all the world declares, by them and not by us.

That there are great evils in a society where slavery exists, and that the institution is liable to great abuse, I have already said. To say otherwise would be to say that they were not human. But the whole of human life is a system of evils and compensations. We have no reason to believe that the compensations with us are fewer or smaller in proportion to the evils than those of any other condition of society. Tell me of an evil or abuse; of an instance of cruelty, oppression, licentiousness, crime, or suffering; and I will point out, and often in fivefold degree, an equivalent evil or abuse in countries where slavery does not exist!

Let us examine, without blenching, the actual and alleged evils of slavery, and the array of horrors which many suppose to be its universal concomitants. It is said that the slave is out of the protection of the law; that if the law purports to protect him in life and limb, it is but imperfectly executed; that he is still subject to excessive labor, degrading blows, or any other sort of torture which a master, pampered and brutalized by the exercise of arbitrary power, may think proper to inflict; he is cut off from the opportunity of intellectual, moral, or religious improvement, and even positive enactments are directed against his acquiring the rudiments of knowledge; he is cut off for ever from the hope of raising his condition in society, whatever may be his merit, talents, or virtues, and therefore deprived of the strongest incentive to useful and praiseworthy exertion; his physical degradation begets a corresponding moral degradation; he is without moral principle, and addicted to the lowest vices, particularly theft and falsehood; if marriage be not disallowed, it is little better than a state of concubinage, from which results general licentiousness, and the want of chastity among females—this indeed is not

protected by law, but is subject to the outrages of brutal lust; both sexes are liable to have their dearest affections violated, to be sold like brutes, husbands to be torn from wives, children from parents. This is the picture commonly presented by the denouncers of slavery.

It is a somewhat singular fact, that, when there existed in our state no law for punishing the murderer of a slave, other than a pecuniary fine, there were, I will venture to say, at least ten murders of freemen for one murder of a slave. Yet it is supposed they are less protected or less secure than their masters. Why, they are protected by their very situation in society, and therefore less need the protection of law. With any other person than their master, it is hardly possible for them to come in such sort of collision as usually gives rise to furious and revengeful passions; they offer no temptation to the murderer for gain; against the master himself they have the security of his own interest, and by his superintendence and authority they are protected from the revengeful passions of each other. I am by no means sure that the cause of humanity has been served by the change in jurisprudence, which has placed their murder on the same footing with that of a freeman. The change was made in the subserviency to the opinions and clamor of others, who were utterly incompetent to form an opinion on the subject; and a wise act is seldom the result of legislation in this spirit. From the fact which I have stated, it is plain that they less need protection. Juries are, therefore, less willing to convict, and it may sometimes happen that the guilty will escape all punishment. *Security* is one of the compensations of their humble position. We challenge the comparison, that with us there have been fewer murders of slaves than of parents, children, apprentices, and other murders, cruel and unnatural, in society where slavery does not exist.

But, short of life or limb, various cruelties may be practised, as the passions of the master may dictate. To this the same reply has been often given—that they are secured by the master's interest. If the state of slavery is to exist at all, the master must have, and ought to have, such power of punishment as will compel them to perform the duties of their station. And is not this for their advantage as well as his? No human being can be contented, who does not perform the duties of his station. Has the master any temptation to go beyond this? If he inflicts on him such punishment as will permanently impair his strength, he inflicts a loss upon himself; and so if he requires of him excessive labor. Compare the labor required of the slave with those of the free agricultural or manufacturing laborer in Europe, or even in the more thickly peopled portions of the non-slaveholding states of our confederacy—though these last are no

fair subjects of comparison, they enjoying, as I have said, in a great degree, the advantages of slavery along with those of an early and simple state of society. Read the English parliamentary reports, on the condition of the manufacturing operatives, and the children employed in factories. And such is the impotence of man to remedy the evils which the condition of his existence has imposed on him, that it is much to be doubted whether the attempts by legislation to improve their situation will not aggravate its evils. They resort to this excessive labor as a choice of evils. If so, the amount of their compensation will be lessened also with the diminished labor; for this is a matter which legislation cannot regulate. Is it the part of benevolence, then, to cut them off even from this miserable liberty of choice? Yet would these evils exist in the same degree, if the laborers were the *property* of the master, having a direct interest in preserving their lives, their health, and strength? Who but a drivelling fanatic has thought of the necessity of protecting domestic animals from the cruelty of their owners? And yet, are not great and wanton cruelties practised on these animals? Compare the whole of the cruelties inflicted on slaves throughout our southern country with those elsewhere inflicted, by ignorant and depraved portions of the community, on those whom the relations of society put into their power; of brutal husbands on their wives; of brutal parents—subdued against the strongest instincts of nature to that brutality by the extremity of their misery—on their children; of brutal masters on apprentices. And if it should be asked, Are not similar cruelties inflicted and miseries endured in your societies? I answer, in no comparable degree. The class in question are placed under the control of others, who are interested to restrain their excesses of cruelty or rage. Wives are protected from their husbands, and children from their parents. And this is no inconsiderable compensation of the evils of our system; and would so appear, if we could form any conception of the immense amount of misery which is elsewhere thus inflicted. The other class of society, more elevated in their position, are also (speaking of course in the general) more elevated in character, and more responsible to public opinion.

But besides the interest of their master, there is another security against cruelty. The relation of master and slave, when there is no mischievous interference between them, is, as the experience of all the world declares, naturally one of kindness. As to the fact, we should be held interested witnesses, but we appeal to universal nature. Is it not natural that a man should be attached to that which is *his own*, and which has contributed to his convenience, his enjoyment, or his vanity? This is felt even towards animals and inanimate objects. How much more toward a being

of superior intelligence and usefulness, who can appreciate our feelings toward him, and return them! Is it not natural that we should be interested in that which is dependent on us for protection and support? Do not men every where contract kind feelings toward their dependents? Is it not natural that men should be more attached to those whom they have long known—whom, perhaps, they have reared or been associated with from infancy—than to one with whom their connection has been casual and temporary? What is there in our atmosphere or institutions to produce a perversion of the general feelings of nature? To be sure, in this as in all other relations, there is frequent cause of offense or excitement—on one side, for some omission of duty, on the other, on account of reproach or punishment inflicted. But this is common to the relation of parent and child; and I will venture to say that if punishment be justly inflicted—and there is no temptation to inflict it unjustly—it is as little likely to occasion permanent estrangement or resentment as in that case. Slaves are perpetual children. It is not the common nature of man, unless it be deprived by its own misery, to delight in witnessing pain. It is more grateful to behold contented and cheerful beings than sullen and wretched ones. That men are sometimes wayward, depraved, and brutal, we know. That atrocious and brutal cruelties have been perpetrated on slaves, and on those who were not slaves, by such wretches, we also know. But that the institution of slavery has a natural tendency to form such a character, that such crimes are more common or more aggravated than in other states of society, or produce among us less surprise and horror, we utterly deny, and challenge the comparison. Indeed, I have little hesitation in saying, that if full evidence could be obtained, the comparison would result in our favor, and that the tendency of slavery is rather to humanize than to brutalize.

The accounts of travellers in Oriental countries give a very favorable representation of the kindly relations which exist between the master and slave; the latter being often the friend, and sometimes the heir of the former. Generally, however, especially if they be English travellers, if they say anything which may seem to give a favorable complexion to slavery, they think it necessary to enter their protest, that they shall not be taken to give any sanction to slavery as it exists in America. Yet human nature is the same in all countries. There are very obvious reasons why in those countries there should be a nearer approach to equality in their manners. The master and slave are often cognate races, and therefore tend more to assimilate. There is, in fact, less inequality in mind and character where the master is but imperfectly civilized. Less labor is exacted, because the master has fewer motives to accumulate. But is it an

injury to a human being, that regular, if not excessive, labor should be required of him! The primeval curse, with the usual benignity of providential contrivance, has been turned into the solace of an existence that would be much more intolerable without it. If they labor less, they are much more subject to the outrages of capricious passion. If it were put to the choice of any human being, would he prefer to be the slave of a civilized man, or of a barbarian or semi-barbarian? But if the general tendency of the institution in those countries is to create kindly relations, can it be imagined why it should operate differently in this? It is true, as suggested by President Dew, with the exception of the ties of close consanguinity, it forms one of the most intimate relations of society. And it will be more and more so, the longer it continues to exist. The harshest features of slavery were created by those who were strangers to slavery—who supposed that it consisted in keeping savages in subjection by violence and terror. The severest laws to be found on our statute book were enacted by such, and such are still found to be the severest masters. As society becomes settled, and the wandering habits of our countrymen altered, there will be a larger and larger proportion of those who were reared by the owner, or derived to him from his ancestors, and who, therefore, will be more and more intimately regarded as forming a portion of his family.

It is true that the slave is driven to labor by stripes; and if the object of punishment be to produce obedience or reformation, with the least permanent injury, it is the best method of punishment. But is it not intolerable that a being formed in the image of his Maker should be degraded by blows? This is one of the perversions of mind and feeling to which I shall have occasion again to refer. Such punishment would be degrading to a freeman, who had the thoughts and aspirations of a freeman. In general, it is not degrading to a slave, nor is it felt to be so. The evil is the bodily pain. Is it degrading to a child? Or if in any particular instance it would be so felt, is it sure not to be inflicted, unless in those rare cases which constitute the startling and eccentric evils, from which no society is exempt, and against which no institutions of society can provide.

OBJECTION ANSWERED—"THE SLAVE IS CUT OFF FROM THE MEANS OF INTELLECTUAL, MORAL, AND RELIGIOUS IMPROVEMENT, AND IN CONSEQUENCE HIS MORAL CHARACTER BECOMES DEPRAVED, AND HE ADDICTED TO DEGRADING VICES."—PART III.—*The slave is cut off from the means of intellectual, moral, and religious improvement, and in consequence his moral character becomes depraved, and he addicted to degrading vices. The slave receives such instruction as qualifies him to discharge the*

duties of his particular station. The Creator did not intend that every individual human being should be highly cultivated, morally and intellectually, for, as we have seen, he has imposed conditions on society which would render this impossible. There must be general mediocrity, or the highest cultivation must exist along with ignorance, vice, and degradation. But is there, in the aggregate of society, less opportunity for intellectual and moral cultivation, on account of the existence of slavery? We must estimate institutions from their aggregate of good or evil. I refer to the views which I have before expressed to this society. It is by the existence of slavery, exempting so large a portion of our citizens from the necessity of bodily labor, that we have a greater proportion than any other people who have leisure for intellectual pursuits, and the means of obtaining a liberal education. If we throw away this opportunity, we shall be morally responsible for the neglect or abuse of our advantages, and shall most unquestionably pay the penalty. But the blame will rest on ourselves, and not on the character of our institutions.

I add further, notwithstanding that *equality* seems to be the passion of the day, if, as Providence has evidently decreed, there can be but a certain portion of intellectual excellence in any community, it is better that it should be *unequally* divided. It is better that a part should be fully and highly cultivated, and the rest utterly ignorant. To constitute a society, a variety of offices must be discharged, from those requiring but the lowest degree of intellectual power to those requiring the very highest, and it should seem that the endowments ought to be apportioned according to the exigencies of the situation. In the course of human affairs, there arise difficulties which can only be comprehended or surmounted by the strongest native power of intellect, strengthened by the most assiduous exercise, and enriched by the most extended knowledge; and even these are sometimes found inadequate to the exigency. The first want of society is—leaders. Who shall estimate the value to Athens of Solon, Aristides, Themistocles, Cymon, or Pericles? If society have not leaders qualified as I have said, they will have those who will lead them blindly to their loss and ruin. Men of no great native power of intellect, and of imperfect and superficial knowledge, are the most mischievous of all; none are so busy, meddling, confident, presumptuous, and intolerant. The whole of society receives the benefit of the exertions of a mind of extraordinary endowments. Of all communities, one of the least desirable would be that in which imperfect, superficial, half-education should be universal. The first care of a state which regards its own safety, prosperity and honor, should be, that when minds of extraordinary power

appear—to whatever department of knowledge, art, or science their exertions may be directed—the means should be provided of their most consummate cultivation. Next to this, that education should be as widely extended as possible.

Oidium has been cast upon our legislation on account of its forbidding the elements of education to be communicated to slaves. But, in truth, what injury is done to them by this? He who works during the day with his hands, does not read in intervals of leisure for his amusement or the improvement of his mind—or the exceptions are so very rare as scarcely to need the being provided for. Of the many slaves whom I have known capable of reading, I have never known one to read any thing but the Bible, and this task they impose on themselves as matter of duty. Of all methods of religious instruction, however, this, of reading for themselves, would be the most inefficient—their comprehension is defective, and the employment is to them an unusual and laborious one. There are but very few who do not enjoy other means, more effectual for religious instruction. There is no place of worship opened for the white population from which they are excluded. I believe it a mistake to say that the instructions there given are not adapted to their comprehension, or calculated to improve them. If they are given as they ought to be, practically and without pretension, and are such as are generally intelligible to the free part of the audience, comprehending all grades of intellectual capacity, they will not be unintelligible to slaves. I doubt whether this be not better than instruction addressed specially to themselves, which they might look upon as a device of the master's, to make them more obedient and profitable to himself. Their minds, generally, show a strong religious tendency, and they are fond of assuming the office of religious instructors to each other; and perhaps their religious notions are not much more extravagant than those of a large portion of the free population of our country. I am not sure that there is a much smaller proportion of them than of the free population, who make some sort of religious profession. It is certainly the master's *interest* that they should have proper religious sentiments, and if he fails in his duty towards them, we may be sure that the consequences will be visited not upon them, but upon him.

If there were any chance of their elevating their rank and condition in society, it might be matter of hardship that they should be debarred those rudiments of knowledge which open the way to further attainments. But this they know cannot be, and that further attainments would be useless to them. Of the evil of this I shall speak hereafter. A knowledge of reading, writing, and the elements of arithmetic is convenient and impor-

tant to the free laborer, who is the transactor of his own affairs, and the guardian of his own interests; but of what use would they be to the slave? These alone do not elevate the mind or character; if such elevation were desirable.

If we estimate their morals according to that which should be the standard of a free man's morality, then I grant they are degraded in morals, though by no means to the extent which those who are unacquainted with the institution seem to suppose. We justly suppose, that the Creator will require of man the performance of the duties of the station in which his providence has placed him, and the cultivation of the virtues which are adapted to their performance; that He will make allowance for all imperfection of knowledge, and the absence of the usual helps and motives which lead to self-correction and improvement. The degradation of morals relates principally to loose notions of honesty, leading to petty thefts; to falsehood, and to licentious intercourse between the sexes. Though with respect even to these, I protest against the opinion, which seems to be elsewhere entertained, that they are universal, or that slaves, in respect to them, might not well bear a comparison with the lowest laborious class of other countries. But certainly there is much dishonesty, leading to petty thefts. It leads, however, to nothing else. They have no contracts or dealings which might be a temptation to fraud, nor do I know that their characters have any tendency that way. They are restrained by the constant, vigilant, and interested superintendence which is exercised over them, from the commission of offenses of greater magnitude, even if they were disposed to them, which I am satisfied they are not. Nothing is so rarely heard of as an atrocious crime committed by a slave; especially since they have worn off the savage character which their progenitors brought with them from Africa. Their offenses are confined to petty depredations, principally for the gratification of their appetites, and these, for reasons already given, are chiefly confined to the property of their owner, which is most exposed to them. They could make no use of a considerable booty, if they should obtain it. It is plain that this is a less evil to society, in its consequences and example, than if committed by a freeman, who is a master of his own time and actions. With reference to society, then, the offense is less in itself—and may we not hope it is less in the sight of God? A slave has no hope that, by a course of integrity, he can materially elevate his condition in society, nor can his offense materially depress it, or affect his means of support or that of his family. Compared to the freeman, he has no character to establish or to lose. He has not been exercised to self-government, and, being without intellectual resources, can

less resist the solicitations of appetite. Theft in a freeman is a crime; in a slave, it is a vice. I recollect to have heard it said, in reference to some question of a slave's theft, which was agitated in a court—"Courts of justice have no more to do with a slave's stealing than with his lying—that is a matter for the domestic forum." It was truly said—the theft of a slave is no offense against society. Compare all the evils resulting from this, with the enormous amount of vice, crime, and depravity which in a European, or one of our northern cities, disgusts the moral feelings, and renders life and property insecure. So with respect to his falsehood. I have never heard or observed that slaves have any particular proclivity to falsehood, unless it be in denying or concealing their own offenses, or those of their fellows. I have never heard of falsehood told by a slave for a malicious purpose. Lies of vanity are sometimes told, as among the weak and ignorant of other conditions. Falsehood is not attributed to an individual charged with an offense before a court of justice, who pleads *not guilty*; and certainly the strong temptation to escape punishment, in the highest degree extenuates, if it does not excuse, falsehood told by a *slave*. If the object be to screen a fellow-slave, the act bears some semblance of fidelity, and perhaps truth could not be told without breach of confidence. I know not how to characterize the falsehood of a slave.

It has often been said by the denouncers of slavery, that marriage does not exist among slaves. It is difficult to understand this, unless wilful falsehood were intended. We know that marriages are contracted; may be, and often are, solemnized with the forms usual among other classes of society, and often faithfully adhered to during life. The law has not provided for making those marriages indissoluble, nor could it do so. If a man abandons his wife, being without property, and being both property themselves, he cannot be required to maintain her. If he abandons his wife, and lives in a state of concubinage with another, the law cannot punish him for bigamy. It may, perhaps, be meant, that the chastity of wives is not protected by law from the outrages of violence. I answer, as with respect to their lives, that they are protected by manners, and their position. Who ever heard of such outrages being offered? At least as seldom, I will venture to say, as in other communities of different forms of polity. One reason, doubtless, may be, that often there is no disposition to resist. Another reason, also, may be, that there is little temptation to such violence, as there is so large a proportion of this class of females who set little value on chastity, and afford easy gratification to the hot passions of men. It might be supposed, from the representations of some writers, that a slaveholding

country were one wide stew for the indulgence of unbridled lust. Particular instances of intemperate and shameless debauchery are related, which may, perhaps, be true, and it is left to be inferred that this is the universal state of manners. Brutes and shameless debauchees there are in every country; we know that if such things are related as general or characteristic, the representation is false. Who would argue from the existence of a Col. Chaatres in England, or of some individuals who might, perhaps, be named in other portions of this country, of the horrid dissoluteness of manners occasioned by the want of the institution of slavery? Yet the argument might be urged quite as fairly, and really, it seems to me, with a little more justice—for there, such depravity is attended with much more pernicious consequences. Yet let us not deny or extenuate the truth. It is true that in this respect the morals of this class are very loose, (by no means so universally so as is often supposed,) and that the passions of men of the superior caste tempt and find gratification in the easy chastity of the females. This is evil, and to be remedied, if we can do so, without the introduction of greater evil. But evil is incident to every condition of society, and, as I have said, we have only to consider in which institution it most predominates.

Compare these prostitutes of our country, (if it is not injustice to call them so,) and their condition, with those of other countries—the seventy thousand prostitutes of London, or of Paris, or the ten thousand of New-York, or our other northern cities. Take the picture given of the first from the author whom I have before quoted: "The laws and customs of England conspire to sink this class of English women into a state of vice and misery below that which necessarily belongs to their condition. Hence their extreme degradation, their troopers' oaths, their love of gin, their desperate recklessness, and the shortness of their miserable lives."

"English women of this class—or rather girls, for few of them live to be women—die like sheep with the rot; so fast that soon there would be none left, if a fresh supply were not obtained equal to the number of deaths. But a fresh supply is always obtained without the least trouble: seduction easily keeps pace with prostitution or mortality. Those that die are, like factory children that die, instantly succeeded by new competitors for misery and death." There is no hour of a summer's or a winter's night, in which there may not be found in the streets a ghastly wretch, expiring under the double tortures of disease and famine. Though less aggravated in its features, the picture of prostitution in New-York or Philadelphia would be of like character.

In such communities, the unmarried woman

who becomes a mother is an outcast from society; and though sentimentalists lament the hardship of the case, it is justly and necessarily so. She is cut off from the hope of useful and profitable employment, and driven by necessity to further vice. Her misery, and the hopelessness of retrieving, render her desperate, until she sinks into every depth of depravity, and is prepared for every crime that can contaminate and infest society. She has given birth to a human being who, if it be so unfortunate as to survive its miserable infancy, is commonly educated to a like course of vice, depravity, and crime.

Compare with this the female slave under similar circumstances. She is not a less useful member of society than before. If shame be attached to her conduct, it is such a shame as would be elsewhere felt for a venial impropriety. She has not impaired her means of support, nor materially impaired her character, or lowered her station in society; she has done no great injury to herself, or any other human being. Her offspring is not a burden, but an acquisition to her owner; his support is provided for, and he is brought up to usefulness; if the fruit of intercourse with a free-man, his condition is perhaps raised somewhat above that of his mother. Under these circumstances, with imperfect knowledge, tempted by the strongest of human passions, unrestrained by the motives which operate to restrain, but are so often found insufficient to restrain the conduct of females elsewhere, can it be matter of surprise that she should so often yield to the temptation? Is not the evil less in itself, and in reference to society—much less in the sight of God and man? As was said of theft, the want of chastity—which among females of other countries is sometimes vice, sometimes crime, among the free of our own, much more aggravated—among slaves, hardly deserves a harsher term than that of weakness. I have heard of complaint made by a free prostitute, of the greater countenance and indulgence shown by society towards colored persons of her profession, (always regarded as of an inferior and servile class, though individually free,) than to those of her own complexion. The former readily obtain employment, are even admitted into families, and treated with some degree of kindness and familiarity, while any approach to intercourse with the latter is shunned as contamination. The distinction is habitually made, and it is founded on the unerring instinct of nature. The colored prostitute is, in fact, a far less contaminated and depraved being. Still, many, in spite of temptation, do preserve a perfectly virtuous conduct, and I imagine it hardly ever entered into the mind of one of these that she was likely to be forced from it by authority or violence.

It may be asked, if we have no prostitutes

from the free class of society among ourselves? I answer, in no assignable proportion. With general truth it might be said that there are none. When such a case occurs, it is among the rare evils of society. And apart from other and better reasons, which we believe to exist, it is plain that it must be so, from the comparative absence of temptation. Our brothels, comparatively very few—and these should not be permitted to exist at all—are filled, for the most part, by importation from the cities of our confederate states where slavery does not exist. In return for the benefits which they receive from our slavery, along with tariffs, libels, opinions moral, religious or political, they furnish us also with a supply of thieves and prostitutes. Never, but in a single instance, have I heard of an imputation on the general purity of manners among the free females of the slaveholding states. Such an imputation, however, and made in coarse terms, we have never heard here—*here*, where divorce was never known; where no court was ever polluted by an action for criminal conversation with a wife; where it is related rather as a matter of tradition, not unmingled with wonder, that a Carolinian woman of education and family proved false to her conjugal faith—an imputation deserving only of such reply as self-respect would forbid us to give, if respect for the author of it did not. And can it be doubted that this purity is caused by, and is a compensation for, the evils resulting from the existence of an enslaved class of more relaxed morals?

It is mostly the warm passions of youth which give rise to licentious intercourse. But I do not hesitate to say that the intercourse which takes place with enslaved females is less depraving in its effects than when it is carried on with females of their own caste. In the first place, as like attracts like, that which is unlike repels; and though the strength of passion be sufficient to overcome the repulsion, still the attraction is less. He feels that he is connecting himself with one of an inferior and servile caste, and that there is something of degradation in the act. The intercourse is generally casual; he does not make her habitually an associate, and is less likely to receive any taint from her habits and manners. He is less liable to those extraordinary fascinations with which worthless women sometimes entangle their victims, to the utter destruction of all principle, worth, and vigor of character. The female of his own race offers greater allurements. The haunts of vice often present a show of elegance, and various luxury tempts the senses. They are made an habitual resort, and their inmates associates, till the general character receives a taint from the corrupted atmosphere. Not only the practice is licentious, but the understanding is sophisticated; the moral feelings

are bewildered, and the boundaries of virtue and vice confused. Where such licentiousness very extensively prevails, society is rotten to the heart.

But is it a small compensation for the evils attending the relation of the sexes among the enslaved class, that they have universally the opportunity of indulging the first instinct of nature, by forming matrimonial connections? What painful restraint—what constant effort to struggle against the strongest impulses, are habitually practised elsewhere, and by other classes! And they must be practised, unless greater evils would be encountered. On the one side, all the evils of vice, with the miseries to which it leads; on the other, a marriage cursed and made hateful by want, the sufferings of children, and agonizing apprehensions concerning their future fate. Is it a small good that the slave is free from all this? He knows that his own subsistence is secure, and that his children will be in as good a condition as himself. To a refined and intellectual nature, it may not be difficult to practise the restraint of which I have spoken. But the reasoning from such to the great mass of mankind is most fallacious. To these, the supply of their natural and physical wants, and the indulgence of the natural domestic affections, must, for the most part, afford the greatest good of which they are capable. To the evils which sometimes attend their matrimonial connections, arising from their looser morality, slaves, for obvious reasons, are comparatively insensible. I am no apologist for vice, nor would I extenuate the conduct of the profligate and unfeeling, who would violate the sanctity of even these engagements, and occasion the pain which such violations no doubt do often inflict. Yet such is the truth, and we cannot make it otherwise. We know that a woman's having been before a mother, is very seldom indeed an objection to her being made a wife. I know perfectly well how this will be regarded, by a class of reasoners or declaimers, as imposing a character of deeper horror on the whole system; but still, I will say, that if they are to be exposed to the evil, it is mercy that the sensibility to it should be blunted. Is it no compensation, also, for the vices incident to slavery, that they are to a great degree secured against the temptation to greater crimes and more atrocious vices, and the miseries which attend them; against their own disposition to indolence, and the profligacy which is its common result?

But if they are subject to the vices, they have also the virtues of slaves. Fidelity—often proof against all temptation, even death itself; an eminently cheerful and social temper; what the Bible imposes as a duty, but which might seem an equivocal virtue in the code of modern morality—submission to constituted authority, and a disposition to be attached to, as well as to respect those whom

they are taught to regard as superiors. They may have all the knowledge which will make them useful in the station in which God has been pleased to place them, and may cultivate the virtues which will render them acceptable to him. But what has the slave of any country to do with heroic virtues, liberal knowledge, or elegant accomplishments? It is for the master—arising out of his situation, imposed on him as a duty, dangerous and disgraceful if neglected—to compensate for this, by his own more assiduous cultivation of the more generous virtues and liberal attainments.

It has been supposed one of the great evils of slavery, that it affords the slave no opportunity of raising himself to a higher rank in society, and that he has therefore no inducement to meritorious exertion or the cultivation of his faculties. The indolence and carelessness of the slave, and the less productive quality of his labor, are traced to the want of such excitement. The first compensation for this disadvantage is his security. If he can rise no higher, he is just in the same degree secured against the chances of falling lower. It has been sometimes made a question, whether it were better for man to be freed from the perturbations of hope and fear, or to be exposed to their vicissitudes. But I suppose there could be little question with respect to a situation in which the fears must greatly predominate over the hopes. And such I apprehend to be the condition of the laboring poor in countries where slavery does not exist. If not exposed to present suffering, there is continual apprehension for the future, for themselves, for their children, of sickness and want, if not of actual starvation. They expect to improve their circumstances! Would any one person of ordinary candor say that there is one in a hundred of them who does not well know that, with all the exertion he can make, it is out of his power materially to improve his circumstances? I speak not so much of menial servants, who are generally of a superior class, as of the agricultural and manufacturing laborers. They labor with no such view. It is the instinctive struggle to preserve existence, and when the superior efficiency of their labor over that of our slaves is pointed out as being animated by a free-man's hopes, might it not well be replied—it is because they labor under a sterner compulsion! The laws interpose no obstacle to their raising their condition in society. 'Tis a great boon; but as to the great mass, they know that they never will be able to raise it; and it should seem not very important in effect, whether it be the interdict of law, or imposed by the circumstances of the society. One in a thousand is successful. But does his success compensate for the sufferings of the many who are tantalized, baffled, and tortured in vain attempts to attain a like result? If the

individual be conscious of intellectual power, the suffering is greater. Even where success is apparently attained, he sometimes gains it but to die, or, with all capacity, to enjoy it exhausted, worn out in the struggle with fortune. If it be true that the African is an inferior variety of the human race, of less elevated character and more limited intellect, is it not desirable that the inferior laboring class should be made up of such, who will conform to their condition without painful aspirations and vain struggles?

The slave is certainly liable to be sold. But perhaps it may be questioned whether this is a greater evil than the liability of the laborer, in fully peopled countries, to be dismissed by his employer, with the uncertainty of being able to obtain employment or the means of subsistence elsewhere. With us, the employer cannot dismiss his laborer without providing him with another employer. His means of subsistence are secure, and this is a compensation for much. He is also liable to be separated from wife or child—though not more frequently, that I am aware of, than the exigency of their condition compels the separation of families among the laboring poor elsewhere—but, from native character and temperament, the separation is much less severely felt. And it is one of the compensations, that he may sustain these relations without suffering a still severer penalty for the indulgence.

The love of liberty is a noble passion—to have the free, uncontrolled disposition of ourselves, our words and actions. But, alas! it is one in which we know that a large portion of the human race can never be gratified. It is mockery to say that the laborer any where has such disposition of himself, though there may be an approach to it in some peculiar—and those, perhaps, not the most desirable—states of society. But unless he be properly disciplined and prepared for its enjoyment, it is the most fatal boon that could be conferred—fatal to himself and others. If slaves have less freedom of action than other laborers, which I by no means admit, they are saved in a great degree from the responsibility of self-government, and the evils springing from their own perverse wills. Those who have looked most closely into life, and know how great a portion of human misery is derived from these sources—the undecided and wavering purpose, producing ineffectual exertion, or indolence with its thousand attendant evils—the wayward conduct, intemperance or profligacy—will most appreciate this benefit. The line of a slave's duty is marked out with precision, and he has no choice but to follow it. He is saved the double difficulty, first of determining the proper course for himself, and then of summoning up the energy which will sustain him in pursuing it.

If some superior power should impose on the laborious poor of any other country, this as their unalterable condition: You shall be saved from the torturing anxiety concerning your own future support, and that of your children, which now pursues you through life and haunts you in death; you shall be under the necessity of regular and healthful, though not excessive labor; in return, you shall have the ample supply of your natural wants; you may follow the instinct of nature in becoming parents, without apprehending that this supply will fail yourselves or your children; you shall be supported and relieved in sickness, and in old age wear out the remains of existence among familiar scenes and accustomed associates, without being driven to beg, or to resort to the hard and miserable charity of a workhouse; you shall of necessity be temperate, and shall have neither the temptation nor opportunity to commit great crimes, or practice the more destructive vices—how inappreciable would the boon be thought! And is not this a very near approach to the condition of our slaves? The evils of their situation they but lightly feel, and would hardly feel at all, if they were not sedulously instructed into sensibility. Certain it is, that if their fate were at the absolute disposal of a council of the most enlightened philanthropists in Christendom, with unlimited resources, they could place them in no situation so favorable to themselves as that which they at present occupy. But whatever good there may be, or whatever mitigation of evil, it is worse than valueless, because it is the result of slavery.

I am aware that, however often answered, it is likely to be repeated again and again—How can that institution be tolerable by which a large class of society is cut off from the hope of improvement in knowledge; to whom blows are not degrading, theft no more than a fault, falsehood and the want of chastity almost venial; and in which a husband or parent looks with comparative indifference on that which to a freeman would be the dishonor of a wife or child?

But why not, if it produces the greatest aggregate of good? Sin and ignorance are only evils because they lead to misery. It is not our institution, but the institution of nature, that in the progress of society a portion of it should be exposed to want, and the misery which it brings, and therefore involved in ignorance, vice, and depravity. In anticipating some of the good, we also anticipate a portion of the evil of civilization. But we have it in a mitigated form. The want and the misery are unknown; the ignorance is less a misfortune, because the being is not the guardian of himself, and partly on account of that involuntary ignorance, the vice is less vice—less hurtful to man, and less displeasing to God.

IN WHAT OUR SLAVERY DIFFERS FROM THE SERVITUDE OF OTHER COUNTRIES—GENERAL INFLUENCES OF SLAVERY.—PART IV.—There is something in this word *Slavery* which seems to partake of the qualities of the insane root, and distempers the minds of men. That which would be true in relation to one predicament, they misapply to another, to which it has no application at all. Some of the virtues of a freeman would be the vices of slaves. To submit to a blow would be degrading to a freeman, because he is the protector of himself. It is not degrading to a slave—neither is it to a priest or a woman. And is it a misfortune that it should be so? The freeman of other countries is compelled to submit to indignities hardly more endurable than blows—indignities to make the sensitive feelings shrink, and the proud heart swell; and this very name of freeman gives them double rancor. If, when a man is born in Europe, it were certainly foreseen that he was destined to a life of painful labor—to obscurity, contempt, and privation—would it not be mercy that he should be reared in ignorance and apathy, and trained to the endurance of the evils he must encounter? It is not certainly foreseen as to any individual, but it is foreseen as to the great mass of those born of the laboring poor; and it is for the mass, not for the exception, that the institutions of society are to provide. Is it not better that the character and intellect of the individual should be suited to the station which he is to occupy? Would you do a benefit to the horse or the ox, by giving him a cultivated understanding, or fine feelings? So far as the mere laborer has the pride, the knowledge, or the aspirations of a freeman, he is unfitted for his situation, and must doubly feel his infelicity. If there are sordid, servile, and laborious offices to be performed, is it not better that there should be sordid, servile, and laborious beings to perform them? If there were infallible marks by which individuals of inferior intellect, and inferior character, could be selected at their birth, would not the interests of society be served, and would not some sort of fitness seem to require, that they should be selected for the inferior and servile offices? And if this race be generally marked by such inferiority, is it not fit that they should fill them?

I am well aware that those whose aspirations are after a state of society from which evil shall be banished, and who look in life for that which life will never afford, contemplate that all the offices of life may be performed without contempt or degradation—all be regarded as equally liberal, or equally respected. But theorists cannot control Nature and bend her to their views, and the inequality of which I have before spoken is deeply founded in nature. The offices which employ knowledge and intellect will always be regarded as more liberal than those which only

require the labor of the hands. When there is competition for employment, he who gives it bestows a favor, and it will be so received. He will assume superiority from the power of dismissing his laborers, and from fear of this, the latter will practise deference, often amounting to servility. Such in time will become the established relation between the employer and the employed, the rich and the poor. If want be accompanied with sordidness and squalor, though it be pitied, the pity will be mixed with some degree of contempt. If it lead to misery, and misery to vice, there will be disgust and aversion.

What is the essential character of *Slavery*, and in what does it differ from the *servitude* of other countries? If I should venture on a definition, I should say that where a man is compelled to labor at the will of another, and to give him much the greater portion of the product of his labor, there *Slavery* exists; and it is immaterial by what sort of compulsion the will of the laborer is subdued. It is what no human being would do without some sort of compulsion. He cannot be compelled to labor by blows. No—but what difference does it make, if you can inflict any other sort of torture which will be equally effectual in subduing the will? if you can starve him, or alarm him for the subsistence of himself or his family? And is it not under this compulsion that the *freeman* labors? I do not mean in every particular case, but in the general. Will any one be hardy enough to say that he is at his own disposal, or has the government of himself? True, he may change his employer if he is dissatisfied with his conduct towards him; but this is a privilege he would in the majority of cases gladly abandon, and render the connection between them indissoluble. There is far less of the interest and attachment in his relation to his employer, which so often exists between the master and the slave, and mitigates the condition of the latter. An intelligent English traveller has characterized as the most miserable and degraded of all beings, "a masterless slave." And is not the condition of the laboring poor of other countries too often that of masterless slaves? Take the following description of a *free* laborer, no doubt highly colored, quoted by the author to whom I have before referred:

"What is that defective being, with calfless legs and stooping shoulders, weak in body and mind, inert, pusillanimous, and stupid, whose premature wrinkles and furtive glance tell of misery and degradation? That is an English peasant or pauper, for the words are synonymous. His sire was a pauper, and his mother's milk wanted nourishment. From infancy his food has been bad, as well as insufficient; and he now feels the pains of unsatisfied hunger nearly whenever he is awake. But half clothed, and never supplied with more warmth than suffices to cook his scanty meals, cold and

wet come to him, and stay by him with the weather. He is married, of course; for to this he would have been driven by the poor laws, even if he had been, as he never was, sufficiently comfortable and prudent to dread the burden of a family. But though instinct and the overseer have given him a wife, he has not tasted the highest joys of husband and father. His partner and his little ones being, like himself, often hungry, seldom warm, sometimes sick without aid, and always sorrowful without hope, are greedy, selfish, and vexing; so, to use his own expression, he hates the sight of them, and resorts to his bovel only because a hedge affords less shelter from the wind and rain. Compelled by parish law to support his family, which means, to join them in consuming an allowance from the parish, he frequently conspires with his wife to get that allowance increased, or prevent its being diminished. This brings beggary, trickery, and quarrelling, and ends in settled craft. Though he have the inclination, he wants the courage to become, like more energetic men of his class, a poacher or smuggler on a small scale, but he pilfers occasionally, and teaches his children to lie and steal. His subdued and slavish manner towards his great neighbors shows that they treat him with suspicion and harshness. Consequently, he at once hates and dreads them; but he will never harm them by violent means. Too degraded to be desperate, he is only thoroughly depraved. His miserable career will be short; rheumatism and asthma are conducting him to the workhouse, where he will breathe his last without one pleasant recollection, and so make room for another wretch, who may live and die in the same way." And this description, or some other not much less revolting, is applied to the "bulk of the people—the great body of the people." Take the following description of the condition of childhood, which has justly been called eloquent:*

"The children of the very poor have no young times. It makes the very heart bleed to overhear the casual street talk between a poor woman and her little girl—a woman of the better sort of poor, in a condition rather above the squalid beings we have been contemplating. It is not of toys, of nursery books, of summer holidays (fitting that age), of the promised sight or play, of praised sufficiency at school; it is of mangling and clear-starching—of the price of coals or of potatoes. The questions of the child, that should be the very outpourings of curiosity in idleness, are marked with forecast and melancholy providence. It has come to be a woman before it was a child. It has learned to go to market; it chaffers, it haggles, it envies, it murmurs; it is knowing, acute, sharpened; it never prattles." Imagine such a description applied to

the children of negro slaves, the most vacant of human beings, whose life is a holiday.

And this people to whom these horrors are familiar, are those who fill the world with clamor concerning the injustice and cruelty of slavery. I speak in no invidious spirit; neither the laws nor the government of England are to be reproached with the evils which are inseparable from the state of their society. As little, undoubtedly, are we to be reproached with the existence of our slavery. Including the whole United States—and, for reasons already given, the whole ought to be included, as receiving in no unequal degree the benefit—may we not say justly that we have less slavery, and more mitigated slavery, than any country in the civilized world!

That they are called free, undoubtedly aggravates the sufferings of the slaves of other regions. They see the enormous inequality which exists, and feel their own misery, and can hardly conceive otherwise than that there is some injustice in the institutions of society to occasion these. They regard the apparently more fortunate class as oppressors; and it adds bitterness that they should be of the same name and race. They feel indignity more acutely, and more of discontent and evil passion is excited. They feel that it is mockery that calls them free. Men do not so much hate and envy those who are separated from them by a wide distance, and some apparently impassable barrier, as those who approach nearer to their own condition, and with whom they habitually bring themselves into comparison. The slave with us is not tantalized with the name of freedom, to which his whole condition gives the lie, and would do so if he were emancipated to-morrow. The African slave sees that Nature herself has marked him as a separate—and if left to himself, I have no doubt he would feel it to be an inferior—race, and interposed a barrier almost insuperable to his becoming a member of the same society, standing on the same footing of right and privilege with his master.

That the African negro is an inferior variety of the human race, is, I think, now generally admitted, and his distinguishing characteristics are such as peculiarly mark him out for the situation which he occupies among us; and those are no less marked in their original country than we have daily occasion to observe them. The most remarkable is their indifference to personal liberty. In this they have followed their instincts, since we have any knowledge of their continent, by enslaving each other; but, contrary to the experience of every other race, the possession of slaves has no material effect in raising the character, and promoting the civilization, of the master. Another trait is the want of domestic affections, and insensibility to the ties of kindred. In the travels of the Landers, after speaking of a single exception, in the person of a wo-

* Essays of Elia.

man who betrayed some transient emotion in passing by the country from which she had been torn as a slave, the author adds—"That Africans, generally speaking, betray the most perfect indifference on losing their liberty and being deprived of their relatives, while love of country is equally a stranger to their breasts, as social tenderness or domestic affection." "Marriage is celebrated by the natives as unconcernedly as possible; a man thinks as little of taking a wife as of cutting an ear of corn; affection is altogether out of the question." They are, however, very submissive to authority, and seem to entertain great reverence for chiefs, priests, and masters. No greater indignity can be offered an individual than to throw opprobrium on his parents. On this point of their character I think I have remarked that, contrary to the instincts of nature in other races, they entertain less regard for children than for parents, to whose authority they have been accustomed to submit. Their character is thus summed up by the traveller quoted:—"The few opportunities we have had of studying their characters induce us to believe that they are a simple, honest, inoffensive, but weak, timid, and cowardly race. They seem to have no social tenderness, very few of those amiable private virtues which could win our affections, and none of those public qualities that claim respect or command admiration. The love of country is not strong enough in their bosoms to entice them to defend it against a despicable foe; and of the active energy, noble sentiments, and contempt of danger, which distinguish the North American tribes, and other savages, no traces are to be found among this slothful people. Regardless of the past, as reckless of the future, the present alone influences their actions. In this respect they approach nearer to the nature of the brute creation than perhaps any other people on the face of the globe." Let me ask, if this people do not furnish the very material out of which slaves ought to be made; and whether it be not an improving of their condition to make them the slaves of civilized masters? There is a variety in the character of the tribes. Some are brutally and savagely ferocious and bloody, whom it would be mercy to enslave. From the travellers' account, it seems not unlikely that the negro race is tending to extermination, being daily encroached on and overrun by the superior Arab race. It may be, that when they shall have been loosed from their native seats, they may be found numerous, and in no unhappy condition, on the continent to which they have been transplanted.

The opinion which connects form and features with character and intellectual power, is one so deeply impressed on the human mind, that perhaps there is scarcely any man who does not almost daily act upon it, and in some measure verify its truth. Yet in spite of this

intimation of nature, and though the anatomist and physiologist may tell them that the races differ in every bone and muscle, and in the proportion of brain and nerves, yet there are some who, with a most bigoted and fanatical determination to free themselves from what they have prejudged to be prejudice, will still maintain that this physiognomy, evidently tending to that of the brute, when compared with that of the Caucasian race, may be enlightened by as much thought, and animated by as lofty sentiments. We, who have the best opportunity of judging, are pronounced to be incompetent to do so, and to be blinded by our interests and prejudices—often by those who have no opportunity at all. Are we to be taught to distrust or disbelieve that which we daily observe, and familiarly know, on such authority? Our prejudices are spoken of. But the truth is, that, until very lately, since circumstances have compelled us to think of ourselves, we took our opinion on this subject, as on every other, ready formed, from the country of our origin. And so deeply rooted were they, that we adhered to them, as most men will do to deeply rooted opinions, even against the evidence of our own observations and our own senses. If the inferiority exists, it is attributed to the apathy and degradation produced by slavery. Though of the hundreds of thousands scattered over other countries, where the laws impose no liability upon them, none has given evidence of an approach to even mediocrity of intellectual excellence, this, too, is attributed to the slavery of a portion of their race. They are regarded as a servile caste, and degraded by opinions, and thus every generous effort is repressed. Yet, though this should be the general effect, this very estimation is calculated to produce the contrary effect in particular instances. It is observed by Bacon, with respect to deformed persons and eunuchs, that though in general there is something of perversity in their character, the disadvantage often leads to extraordinary displays of virtue and excellence. "Whosoever hath any thing in his person that doth induce contempt, hath also a perpetual spur in himself, to rescue and deliver himself from scorn." So it would be with them if they were capable of European aspirations;—genius, if they possessed it, would be doubly fired with noble rage to rescue itself from this scorn. Of course I do not mean to say that there may not be found among them some of superior capacity to many white persons; but that great intellectual powers are, perhaps, never found among them, and that in general their capacity is very limited, and that capacity animal and coarse, fitting them peculiarly to discharge the lower and merely mechanical offices of society. And why should it not be so? We have among domestic animals infinite varieties, distinguished by various degrees of sagacity, courage, strength, swiftness, and

other qualities. And it may be observed, that this is no objection to their being derived from a common origin, which we suppose them to have had. Yet these accidental qualities, as they may be termed, however acquired in the first instance, we know that they transmit unimpaired to their posterity for an indefinite succession of generations. It is most important that these varieties should be preserved, and that each should be applied to the purposes for which it is best adapted. No philo-zoist, I believe, has suggested it as desirable, that these varieties should be melted down into one equal, undistinguished race of curs or road-horses. Slavery, as it is said in an eloquent article published in a southern periodical work,* to which I am indebted for other ideas, "has done more to elevate a degraded race in the scale of humanity; to tame the savage; to civilize the barbarous; to soften the ferocious; to enlighten the ignorant; and to spread the blessings of Christianity among the heathen, than all the missionaries that philanthropy and religion have ever sent forth." Yet, unquestionable as this is, and though human ingenuity and thought may be tasked in vain to devise any other means by which these blessings could have been conferred, yet a sort of sensibility which would be only mawkish and contemptible, if it were not mischievous, affects still to weep over the wrongs of "injured Africa." Can there be a doubt of the immense benefit which has been conferred on the race, by transplanting them from their native, dark, and barbarous regions, to the American continent and islands! There three fourths of the race are in a state of the most deplorable personal slavery. And those who are not, are in a scarcely less deplorable condition of political slavery to barbarous chiefs, who value neither life nor any other human right, or enthralled by priests to the most abject and atrocious superstitions. Take the following testimony of one of the most distinguished observers, who has had an opportunity of observing them in both situations:† "The wild savage is the child of passion, unaided by one ray of religion or morality to direct his course, in consequence of which his existence is stained with every crime that can debase human nature to a level with the brute creation. Who can say that the slaves in our colonies are such? Are they not, by comparison with their still savage brethren, enlightened beings? Is not the West Indian negro, therefore, greatly indebted to his master for making him what he is—for having raised him from the state of debasement in which he was born, and placed him in a scale of civilized society? How can he repay him? He is

possessed of nothing—the only return in his power is his servitude. The man who has seen the wild African, roaming in his native woods, and the well-fed, happy-looking negro of the West India, may, perhaps, be able to judge of their comparative happiness: the former, I strongly suspect, would be glad to change his state of boasted freedom, starvation and disease, to become the slave of sinners, and the commiseration of saints." It was a useful and beneficent work, approaching the heroic, to tame the wild horse, and subdue him to the use of man; how much more to tame the nobler animal that is capable of reason, and subdue him to usefulness.

We believe that the tendency of slavery is to elevate the character of the master. No doubt the character—especially of youth—has sometimes received a taint and premature knowledge of vice, from the contact and association with ignorant and servile beings of gross manners and morals. Yet still we believe that the entire tendency is to inspire disgust and aversion towards their peculiar vices. It was not without a knowledge of nature that the Spartans exhibited the vices of slaves by way of negative example to their children. We flatter ourselves that the view of this degradation, mitigated as it is, has the effect of making probity more strict, the pride of character more high, the sense of honor more strong, than is commonly found where this institution does not exist. Whatever may be the prevailing faults or vices of the masters of slaves, they have not commonly been understood to be those of dishonesty, cowardice, meanness, or falsehood. And so most unquestionably it ought to be. Our institutions would indeed be intolerable in the sight of God and man, if, condemning one portion of society to hopeless ignorance and comparative degradation, they should make no atonement by elevating the other class by higher virtues and more liberal attainments—if, besides degraded slaves, there should be ignorant, ignoble, and degraded freemen. There is a broad and well marked line, beyond which no slavish vice should be regarded with the least toleration or allowance. One class is cut off from all interest in the state—that abstraction so potent to the feelings of a generous nature. The other must make compensation by increased assiduity and devotion to its honor and welfare. The love of wealth—so laudable when kept within proper limits, so base and mischievous when it exceeds them—so infectious in its example, an infection to which, I fear, we have been too much exposed—should be pursued by no arts in any degree equivocal, or at any risk of injustice to others. So surely as there is a just and wise Governor of the universe, who punishes the sins of nations and communities, as well as of individ-

* Southern Literary Messenger for January, 1835.

† Journal of an officer employed in the expedition under the command of Captain Owen, on the West-coast of Africa, 1832.

duals, so surely shall we suffer punishment, if we are indifferent to that moral and intellectual cultivation of which the means are furnished to us, and to which we are called and incited by our situation.

I would to Heaven I could express, as I feel, the conviction how necessary this cultivation is, not only to our prosperity and consideration, but to our safety and very existence. We, the slaveholding states, are in a hopeless minority in our own confederated republic—to say nothing of the great confederacy of civilized states. It is admitted, I believe, not only by slaveholders, but by others, that we have sent to our common councils more than our due share of talent, high character, and eloquence. Yet in spite of all these, most strenuously exerted measures have been sometimes adopted, which we believed to be dangerous and injurious to us, and threatening to be fatal. What would be our situation, if, instead of these, we were only represented by ignorant and grovelling men, incapable of raising their views beyond a job or a petty office, and incapable of commanding hearing or consideration? May I be permitted to advert—by no means invidiously—to the late contest carried on by South Carolina against federal authority, and so happily terminated by the moderation which prevailed in our public councils? I have often reflected what one circumstance, more than any other, contributed to the successful issue of a contest, apparently so hopeless, in which one weak and divided state was arrayed against the whole force of the confederacy—unsustained and uncountenanced even by those who had a common interest with her. It seemed to me to be, that we had for leaders an unusual number of men of great intellectual power, coöperating cordially and in good faith, and commanding respect and confidence at home and abroad, by elevated and honorable character. It was from these that we—the followers at home—caught hope and confidence in the gloomiest aspect of our affairs. These, by their eloquence and the largeness of their views, at least shook the faith of the dominant majority in the wisdom and justice of their measures, or the practicability of carrying them into successful effect, and by their bearing and well-known character, satisfied them that South Carolina would do all that she had pledged herself to do. Without these, how different might have been the result! And who shall say what at this day would have been the aspect of the now flourishing fields and cities of South Carolina? Or rather without these, it is probable the contest would never have been begun; but that, without even the animation of a struggle, we should have sunk silently into a hopeless and degrading subjection. While I

have memory—in the extremity of age—in sickness—under all the reverses and calamities of life—I shall have one source of pride and consolation—that of having been associated, according to my humbler position, with the noble spirits who stood prepared to devote themselves for Liberty—the Constitution—the Union. May such character and such talent never be wanting to South Carolina!

I am sure that it is unnecessary to say to an assembly like this, that the conduct of the master to his slave should be distinguished by the utmost humanity. That we should indeed regard them as wards and dependants on our kindness, for whose well being in every way we are deeply responsible. This is no less the dictate of wisdom and just policy, than of right feeling. It is wise with respect to the services to be expected from them. I have never heard of an owner whose conduct in their management was distinguished by undue severity, whose slaves were not in a great degree worthless to him. A cheerful and kind demeanor, with the expression of interest in themselves and their affairs, is, perhaps, calculated to have a better effect on them, than what might be esteemed more substantial favors and indulgences. Throughout nature, attachment is the reward of attachment. It is wise, too, in relation to the civilized world around us, to avoid giving occasion to the odium which is so industriously excited against ourselves and our institutions. For this reason, public opinion should, if possible, bear even more strongly and indignantly than it does at present, on masters who practise any wanton cruelty on their slaves. The miscreant who is guilty of this, not only violates the law of God and of humanity, but as far as in him lies, by bringing odium upon, endangers the institutions of his country, and the safety of his countrymen. He casts a shade upon the character of every individual of his fellow-citizens, and does every one of them a personal injury. So of him who indulges in any odious excess of intemperate or licentious passion. It is detached instances of this sort, of which the existence is, perhaps, hardly known among ourselves, that, collected with pertinacious and malevolent industry, afford the most formidable weapons to the mischievous zealots, who array them as being characteristic of our general manners and state of society.

I would by no means be understood to intimate, that a vigorous, as well as just government, should not be exercised over slaves. This is part of our duty towards them, no less obligatory than any other duty, and no less necessary towards their well-being than to ours. I believe that at least as much injury has been done and suf-

fering inflicted by weak and injudicious indulgence, as by inordinate severity. He whose business is to labor, should be made to labor, and that with due diligence, and should be vigorously restrained from excess or vice. This is no less necessary to his happiness than to his usefulness. The master who neglects this, not only makes his slaves unprofitable to himself, but discontented and wretched—a nuisance to his neighbors and to society.

I have said that the tendency of our institution is to elevate the female character, as well as that of the other sex, and for similar reasons. In other states of society, there is no well-defined limit to separate virtue and vice. There are degrees of vice, from the most flagrant and odious, to that which scarcely incurs the censure of society. Many individuals occupy an unequivocal position; and as society becomes accustomed to this, there will be a less peremptory requirement of purity in female manners and conduct; and often the whole of the society will be in a tainted and uncertain condition with respect to female virtue. Here, there is that certain and marked line, above which there is no toleration or allowance for any approach to license of manners or conduct, and she who falls below it, will fall far below even the slave. How many will incur this penalty?

And permit me to say, that this elevation of the female character is no less important and essential to us, than the moral and intellectual cultivation of the other sex. It would indeed be intolerable, if, when one class of society is necessarily degraded in this respect, no compensation were made by the superior elevation and purity of the other. Not only essential purity of conduct, but the utmost purity of manners, and, I will add, though it may incur the formidable charge of affectation or prudery, a greater severity of decorum than is required elsewhere, is necessary among us. Always should be strenuously resisted the attempts which have been sometimes made to introduce among us the freedom of foreign European, and especially of continental manners. This freedom, the remotest in the world from that which sometimes springs from simplicity of manners, is calculated and commonly intended to confound the outward distinctions of virtue and vice. It is to prepare the way for licentiousness—to produce this effect—that, if those who are clothed with the outward color and garb of vice may be well received by society, those who are actually guilty may hope to be so too. It may be said, that there is often perfect purity where there is very great freedom of manners. And, I have no doubt, this may be true in particular instances, but it is never true of any society in which this is the general

state of manners. What guards can there be to purity, when every thing that *may possibly* be done innocently, is habitually practised; when there can be no impropriety which is not vice! And what must be the depth of the depravity, when there is a departure from that which they admit as principle? Besides, things which may perhaps be practised innocently where they are familiar, produce a moral dilaceration in the course of their being introduced where they are new. Let us say, we will not have the manners of South Carolina changed.

I have before said, that free labor is cheaper than the labor of slaves, and so far as it is so, the condition of the free laborer is worse. But I think President Dew has sufficiently shown that this is only true of northern countries. It is matter of familiar remark, that the tendency of warm climates is to relax the human constitution and indispose to labor. The earth yields abundantly—in some regions almost spontaneously—under the influence of the sun, and the means of supporting life are obtained with but slight exertion; and men will use no greater exertion than is necessary to the purpose. This very luxuriance of vegetation, where no other cause concurs, renders the air less salubrious, and even when positive malady does not exist, the health is habitually impaired. Indolence renders the constitution more liable to these effects of the atmosphere, and these again aggravate the indolence. Nothing but the coercion of slavery can overcome the repugnance to labor under these circumstances, and by subduing the soil, improve and render wholesome the climate.

CONCLUDING REFLECTIONS.—PART V.—It is worthy of remark, that there does not now exist on the face of the earth a people in a tropical climate, or one approaching to it, where slavery does not exist, that is in a state of high civilization, or exhibits the energies which mark the progress towards it. Mexico and the South American republics,* starting

* The author of England and America thus speaks of the Colombian republic:

"During some years, this colony has been an independent state; but the people dispersed over these vast and fertile plains have almost ceased to cultivate the good land at their disposal; they subsist principally, many of them entirely, on the flesh of wild cattle; they have lost most of the arts of civilized life; not a few of them are in a state of deplorable misery; and if they should continue, as it seems probable they will, to retrograde as at present, the beautiful pampas of Buenos Ayres will soon be fit for another experiment in colonization. Slaves, black or yellow, would have cultivated those plains, would have kept together, would have been made to assist each other; would, by keeping together and assisting each other, have raised a surplus produce exchangeable in distant markets; would have kept their masters together for the sake of markets; would, by combination of labor, have preserved among their masters the arts and habits of civilized life." Yet this writer, the whole practical effect of whose work, whatever he may have thought or intended, is to show the ab-

on their new career of independence, and having gone through a farce of abolishing slavery, are rapidly degenerating, even from semi-barbarism. The only portion of the South American continent which seems to be making any favorable progress, in spite of a weak and arbitrary civil government, is Brazil, in which slavery has been retained. Cuba, of the same race with the continental republics, is daily and rapidly advancing in industry and civilization; and this is owing exclusively to her slaves. St. Domingo is struck out of the map of civilized existence, and the British West Indies will shortly be so. On the other continent, Spain and Portugal are degenerate, and their rapid progress is downward. Their southern coast is infested with disease, arising from causes which industry might readily overcome, but that industry they will never exert. Greece is still barbarous and scantily peopled. The work of an English physician, distinguished by strong sense and power of observation,* gives a most affecting picture of the condition of Italy, especially south of the Apennines. With the decay of industry, the climate has degenerated towards the condition from which it was first rescued by the labor of slaves. There is poison in every man's veins, affecting the very springs of life, dulling or extinguishing, with the energies of the body, all energy of mind, and often exhibiting itself in the most appalling forms of disease. From year to year the pestilential atmosphere creeps forward, narrowing the circles within which it is possible to sustain human life. With disease and misery, industry still more rapidly decays, and if the process goes on, it seems that Italy will soon be ready for another experiment of colonization.

Yet once it was not so, when Italy was possessed by the masters of slaves; when Rome contained her millions, and Italy was a garden; when their iron energies of body corresponded with the energies of mind, which made them conquerors in every climate and on every soil; rolled the tide of conquest, not as in later times, from the south to the north; extended their laws and their civilization, and created them lords of the earth.

*What conflux issuing forth or entering in;
Prætors, pro-consuls to their provinces,
Hasting, or on return in robes of state,
Lictors and rods, the ensigns of their power,
Legions and cohorts, trunks of horse and wings;
Or embassies from regions far remote,
In various habits, on the Applan road,
Or on th' Emilian; some from farthest south,

solitude necessity and immense benefits of slavery. finds it necessary to add, I suppose, in deference to the general sentiment of his countrymen, "that slavery might have done all this, seems not more plain than that so much good would have been bought too dear, if its price had been slavery." Well may we say that the word makes men mad.

* Johnson on Change of Air.

Syene, and where the shadow both way falls,
Moroe, Nilotic lake, and more to west,
The realms of Boeotus to the Blackmoor sea;
From th' Asian kings, and Parthian among these;
From India and the golden Chersonese,
And utmost India's isle, Taprobane,
Dark faces, with white silken turbans wreathed;
From Gallia, Gades, and the British West;
Germans and Scythians, and Sarmatians, north
Beyond Danubius to the Tauric Pool!
All nations now to Rome obedience pay."

Such was and such is the picture of Italy. Greece presents a contrast not less striking. What is the cause of the great change? Many causes, no doubt, have concurred; but though

"War, famine, pestilence, and flood and fire
Have dealt upon the seven-hilled city's pride,"

I will venture to say that nothing has dealt upon it more heavily than the loss of domestic slavery. Is not this evident? If they had slaves, with an energetic civil government, would the deadly miasma be permitted to overspread the Campagna and invade Rome herself? Would not the soil be cultivated, and the wastes reclaimed? A late traveller* mentions a canal, cut for miles through rock and mountain, for the purpose of carrying off the waters of the lake of Celeno, on which thirty thousand Roman slaves were employed for eleven years, and which remains almost perfect to the present day. This, the government of Naples was ten years in repairing with an hundred workmen. The imperishable works of Rome which remain to the present day were, for the most part, executed by slaves. How different would be the condition of Naples, if for her wretched lazzaroni were substituted negro slaves, employed in rendering productive the plains whose fertility now serves only to infect the air!

To us, on whom this institution is fastened, and who could not shake it off even if we desired to do so, the great republics of antiquity offer instruction of inestimable value. They teach us that slavery is compatible with the freedom, stability, and long duration of civil government, with denseness of population, great power, and the highest civilization. And in what respect does this modern Europe, which claims to give opinions to the world, so far excel them—notwithstanding the immense advantages of the Christian religion and the discovery of the art of printing? They are not more free, nor have performed more glorious actions, nor displayed more exalted virtue. In the higher department of intellect—in all that relates to taste and imagination—they will hardly venture to claim equality. Where they have gone beyond them in the results of mechanical philosophy, or discoveries which contribute to the wants and enjoyments of physical life, they have done so by the help

* Eight days in the Abruzzi.—*Blackwood's Magazine*, November, 1835.

of means with which they were furnished by the Grecian mind—the mother of civilization—and only pursued a little farther the track which that had always pointed out. In the development of intellectual power, they will hardly bear comparison. Those noble republics, in the pride of their strength and greatness, may have anticipated for themselves—as some of their poets did for them—an everlasting duration and predominance. But they could not have anticipated, that when they had fallen under barbarous arms, that when arts and civilization were lost, and the whole earth in darkness, the first light should break from their tombs; that in a renewed world, unconnected with them by ties of locality, language, or descent, they should still be held the models of all that is profound in science, or elegant in literature, or all that is great in character, or elevated in imagination. And perhaps when England herself, who now leads the war with which we are on all sides threatened, shall have fulfilled her mission, and like the other glorious things of the earth, shall have passed away; when she shall have diffused her noble race and noble language, her laws, her literature, and her civilization, over all quarters of the earth, and shall perhaps be overrun by some northern horde—sunk into an ignoble and anarchical democracy,* or subdued to the dominion of some Cæsar,—demagogue and despot,—then, in southern regions, there may be found many republics, triumphing in Grecian arts and civilization, and worthy of British descent and Roman institutions.

If after a time, when the mind and almost the memory of the republic were lost, Romans degenerated, they furnish conclusive evidence that this was owing not to their domestic, but to their political slavery. The same thing is observed over all the eastern monarchies; and so it must be, wherever property is insecure, and it is dangerous for a man to raise himself to such eminence by intellectual or moral excellence as would give him influence over his society. So it is in Egypt and the other regions bordering the Mediterranean, which once comprehended the civilization of the world, where Carthage, Tyre, and Phœnicia flourished. In short, the uncontradicted experience of the world is, that in southern states where good government and prædial and domestic slavery are found, there are prosperity and greatness; where either of these conditions is wanting, degeneracy and barbarism. The former, however, is equally essential in all climates and under all institutions. And can we suppose it to be the design of the Creator

that these regions, constituting half of the earth's surface, and the more fertile half and more capable of sustaining life, should be abandoned for ever to depopulation and barbarism! Certain it is, that they will never be reclaimed by the labor of freemen. In our own country, look at the lower valley of the Mississippi, which is capable of being made a far greater Egypt. In our own state, there are extensive tracts of the most fertile soil, which are capable of being made to swarm with life. These are at present pestilential swamps, and valueless, because there is abundance of other fertile soil in more favorable situations, which demand all and more than all the labor which our country can supply. Are these regions of fertility to be abandoned at once and for ever to the alligator and tortoise—with here and there perhaps a miserable, shivering, crouching *free black savage*! Does not the finger of Heaven itself seem to point to a race of men—not to be enslaved by us, but already enslaved, and who will be in every way benefited by the change of masters—to whom such climate is not uncongenial; who, though disposed to indolence, are yet patient and capable of labor; on whose whole features, mind, and character, nature has indelibly written—*slave*; and indicate that we should avail ourselves of these in fulfilling the first great command, to subdue and replenish the earth!

It is true that this labor will be dearer than that of northern countries, where, under the name of freedom, they obtain cheaper and perhaps better slaves. Yet it is the best we can have, and this too has its compensation. We see it compensated at present by the superior value of our agricultural products. And this superior value they must probably always have. The southern climate admits of a greater variety of productions. Whatever is produced in northern climates, the same thing, or something equivalent, may be produced in the southern. But the northern have no equivalent for the products of southern climates. The consequence will be, that the products of southern regions will be demanded all over the civilized world. The agricultural products of northern regions are chiefly for their own consumption. They must therefore apply themselves to the manufacturing of articles of luxury, elegance, convenience or necessity—which require cheap labor—for the purpose of exchanging them with their southern neighbors. Thus nature herself indicates that agriculture should be the predominating employment in southern countries, and manufactures in northern. Commerce is necessary to both—but less indispensable to the southern, which produce within themselves a greater variety of things desirable to life. They will therefore have somewhat less of the commercial spirit. We must avail ourselves of such labor as we can coun-

* I do not use the word democracy in the Athenian sense, but to describe the government in which the slave and his master have an equal voice in public affairs.

wand. The slave must labor, and is inured to it; while the necessity of energy in his government, of watchfulness, and of preparation and power to suppress insurrection, added to the moral force derived from the habit of command, may help to prevent the degeneracy of the master.

The task of keeping down insurrection is commonly supposed, by those who are strangers to our institution, to be a very formidable one. Even among ourselves, accustomed as we have been to take our opinions on this as on every other subject, ready formed from those whom we regarded as instructors, in the teeth of our own observation and experience, fears have been entertained which are absolutely ludicrous. We have been supposed to be nightly reposing over a mine, which may at any instant explode in our destruction. The first thought of a foreigner sojourning in one of our cities, who is awakened by any nightly alarm, is of servile insurrection and massacre. Yet if any thing is certain is human affairs, it is certain, and from the most obvious considerations, that we are more secure in this respect than any civilized and fully-peopled society upon the face of the earth. In every such society, there is a much larger proportion than with us, of persons who have more to gain than to lose by the overthrow of government, and the embroiling of social order. It is in such a state of things that those who were before at the bottom of society, rise to the surface. From causes already considered, they are peculiarly apt to consider their sufferings the result of injustice and misgovernment, and to be rancorous and embittered accordingly. They have every excitement therefore of resentful passion, and every temptation which the hope of increased opulence or power or consideration can hold out, to urge them to innovation and revolt. Supposing the same disposition to exist in equal degree among our slaves, what are their comparative means or prospect of gratifying it? The poor of other countries are called free. They have, at least, no one interested to exercise a daily and nightly superintendence and control over their conduct and actions. Emissaries of their class may traverse, unchecked, every portion of the country, for the purpose of organizing insurrection. From their greater intelligence, they have greater means of communicating with each other. They may procure and secrete arms. It is not alone the ignorant, or those who are commonly called the poor, that will be tempted to revolution. There will be many disappointed men, and men of desperate fortune—men perhaps of talent and daring—to combine them and direct their energies. Even those in the higher ranks of society who contemplate no such result, will contribute to it, by declaiming on their hardships and sights.

With us, it is almost physically impossible

that there should be any very extensive combination among the slaves. It is absolutely impossible that they should procure and conceal efficient arms. Their emissaries traversing the country would carry their commission on their foreheads. If we suppose among them an individual of sufficient talent and energy to qualify him for a revolutionary leader, he could not be so extensively known as to command the confidence which would be necessary to enable him to combine and direct them. Of the class of freemen, there would be no individual so poor or degraded (with the exception perhaps of here and there a reckless and desperate outlaw and felon) who would not have much to lose by the success of such an attempt; every one therefore would be vigilant and active to detect and suppress it. Of all impossible things, one of the most impossible would be a successful insurrection of our slaves, originating with themselves.

Attempts at insurrection have indeed been made—excited, we believe, by the agitation of abolitionists and declaimers on slavery; but these have been in every instance promptly suppressed. We fear not to compare the riots, disorder, revolt and bloodshed which have been committed in our own, with those of any other civilized communities, during the same lapse of time. And let it be observed under what extraordinary circumstances our peace has been preserved. For the last half century, one half of our population has been admonished, in terms the most calculated to madden and excite, that they are the victims of the most grinding and cruel injustice and oppression. We know that these exhortations continually reach them, through a thousand channels we cannot detect, as if carried by the birds of the air; and what human being, especially when unfavorably distinguished by outward circumstances, is not ready to give credit when he is told that he is the victim of injustice and oppression? In effect, if not in terms, they have been continually exhorted to insurrection. The master has been painted a criminal, tyrant and robber, justly obnoxious to the vengeance of God and man, and they have been assured of the countenance and sympathy, if not of the active assistance of all the rest of the world. We ourselves have in some measure pleaded guilty to the impeachment. It is not long since a great majority of our free population, servile to the opinions of those whose opinions they had been accustomed to follow, would have admitted slavery to be a great evil, unjust and indefensible in principle, and only to be vindicated by the stern necessity which was imposed upon us. Thus stimulated by every motive and passion which ordinarily actuate human beings—not as to a criminal enterprise, but as to something generous and heroic—what has been the result? A few imbecile

and uncombined plots—in every instance detected before they broke out into action, and which, perhaps, if undetected, would never have broken into action; one or two sudden, unpremeditated attempts, frantic in their character, if not prompted by actual insanity, and these instantly crushed. As it is, we are not less assured of safety, order and internal peace than any other people; and but for the pertinacious and fanatical agitation of the subject, would be much more so.

This experience of security, however, should admonish us of the folly and wickedness of those who have sometimes taken upon themselves to supersede the regular course of law, and by rash and violent acts to punish supposed disturbers of the peace of society. This can admit of no justification or palliation whatever. Burke, I think, somewhere remarks something to this effect,—that when society is in the last stage of depravity, when all parties are alike corrupt and alike wicked and unjustifiable in their measures and objects, a good man may content himself with standing neuter, a sad disheartened spectator of the conflict between the rival vices. But are we in this wretched condition? It is fearful to see with what avidity the worst and most dangerous characters of society seized on the occasion of obtaining the countenance of better men, for the purpose of throwing off the restraints of law. It is always these who are most zealous and forward in constituting themselves the protectors of the public peace. To such men—men without reputation or principle or stake in society—disorder is the natural element. In that, desperate fortunes and the want of all moral principle and moral feeling constitute power. They are eager to avenge themselves upon society. Anarchy is not so much the absence of government as the government of the worst—not aristocracy but kakistocracy—a state of things which, to the honor of our nature, has seldom obtained amongst them, and which perhaps was only fully exemplified during the worst times of the French revolution, when that horrid hell burst with its most lurid flame. In such a state of things, to be accused is to be condemned—to protect the innocent is to be guilty; and what perhaps is the worst effect, even men of better nature, to whom their own deeds are abhorrent, are goaded by terror to be forward and emulous in deeds of guilt and violence. The scenes of lawless violence which have been acted in some portions of our country, rare and restricted as they have been, have done more to tarnish its reputation than a thousand libels. They have done more to discredit, and if anything could, to endanger, not only our domestic, but our republican institutions, than the abolitionists themselves. Men can never be permanently and effectually disgraced but by themselves, and rarely endangered but by their own in-

judicious conduct, giving advantage to the enemy. Better, far better, would it be to encounter the dangers with which we are supposed to be threatened, than to employ such means for averting them. But the truth is, that in relation to this matter, so far as respects actual insurrection, when alarm is once excited, danger is absolutely at an end. Society can then employ legitimate and more effectual measures for its own protection. The very commission of such deeds is proof that they are unnecessary. Let those who attempt them then, or make any demonstration towards them, understand that they will meet only the discountenance and abhorrence of all good men, and the just punishment of the laws they have dared to outrage.

It has commonly been supposed, that this institution will prove a source of weakness in relation to military defense against a foreign enemy. I will venture to say, that in a slaveholding community, a larger military force may be maintained permanently in the field, than in any state where there are not slaves. It is plain that almost the whole of the able-bodied free male population, making half of the entire able-bodied male population, may be maintained in the field, and this without taking in any material degree from the labor and resources of the country. In general the labor of our country is performed by slaves. In other countries, it is their laborers that form the material of their armies. What proportion of these can be taken away without fatally crippling their industry and resources? In the war of the Revolution, though the strength of our state was wasted and paralyzed by the unfortunate divisions which existed among ourselves, yet it may be said with general truth, that every citizen was in the field, and acquired much of the qualities of the soldier.

It is true that this advantage will be attended with its compensating evils and disadvantages; to which we must learn to submit, if we are determined on the maintenance of our institutions. We are as yet hardly at all aware how little the maxims and practices of modern civilized government will apply to us. Standing armies, as they are elsewhere constituted, we cannot have; for we have not, and for generations cannot have, the materials out of which they are to be formed. If we should be involved in serious wars, I have no doubt but that some sort of conscription, requiring the services of all citizens for a considerable term, will be necessary. Like the people of Athens, it will be necessary that every citizen should be a soldier, and qualified to discharge efficiently the duties of a soldier. It may seem a melancholy consideration, that an army so made up should be opposed to the disciplined mercenaries of foreign nations. But we must learn to know our true situation. But may we not hope

that, made of superior materials, of men having home and country to defend; inspired by higher pride of character, of greater intelligence, and trained by an effective, though honorable discipline, such an army will be more than a match for mercenaries? The efficiency of an army is determined by the qualities of its officers; and may we not expect to have a greater proportion of men better qualified for officers, and possessing the true spirit of military command? And let it be recollected, that if there were otherwise reason to apprehend danger from insurrection, there will be the greatest security when there is the largest force on foot within the country. Then it is that any such attempt would be most instantly and effectually crushed.

And perhaps a wise foresight should induce our state to provide, that it should have within itself such military knowledge and skill as may be sufficient to organise, discipline and command armies, by establishing a military academy or school of discipline. The school of the militia will not do for this. From the general opinion of our weakness, if our country should at any time come into hostile collision, we shall be selected for the point of attack; making us, according to Mr. Adams's anticipation, the Flanders of the United States. Come from what quarter it may, the storm will fall upon us. It is known that lately, when there was apprehension of hostility with France, the scheme was instantly devised of invading the southern states and organizing insurrection. In a popular English periodical work, I have seen the plan suggested by an officer of high rank and reputation in the British army, of invading the southern states at various points and operating by the same means. He is said to be a gallant officer, and certainly had no conception that he was devising atrocious crime, as alien to the true spirit of civilized warfare as the poisoning of streams and fountains. But the folly of such schemes is no less evident than their wickedness. Apart from the consideration of that which experience has most fully proved to be true—that in general their attachment and fidelity to their masters is not to be shaken, and that from sympathy with the feelings of those by whom they are surrounded, and from whom they derive their impressions, they contract no less terror and aversion towards an invading enemy—it is manifest that this recourse would be an hundred fold more available to us than to such an enemy. They are already in our possession, and we might at will arm and organise them in any number that we might think proper. The Helots were a regular constituent part of the Spartan armies. Thoroughly acquainted with their characters, and accustomed to command them, we might use any strictness of discipline which would be necessary to render

them effective, and from their habits of subordination already formed, this would be a task of less difficulty. Though morally most timid, they are by no means wanting in physical strength of nerve. They are excitable by praise; and, directed by those in whom they have confidence, would rush fearlessly and unquestioning upon any sort of danger. With white officers and accompanied by a strong white cavalry, there are no troops in the world from whom there would be so little reason to apprehend insubordination or mutiny.

This I admit might be a dangerous resource, and one not to be resorted to but in great extremity. But I am supposing the case of our being driven to extremity. It might be dangerous to disband such an army, and reduce them, with the habits of soldiers, to their former condition of laborers. It might be found necessary, when once embodied, to keep them so, and subject to military discipline—a permanent standing army. This in time of peace would be expensive, if not dangerous. Or, if at any time we should be engaged in hostilities with our neighbors, and it were thought advisable to send such an army abroad to conquer settlements for themselves, the invaded regions might have occasion to think that the scourge of God was again let loose to afflict the earth.

President Dew has very fully shown how utterly vain are the fears of those who, though there may be no danger for the present, yet apprehend great danger for the future, when the number of slaves shall be greatly increased. He has shown that the larger and more condensed society becomes, the easier it will be to maintain subordination, supposing the relative numbers of the different classes to remain the same—or even if there should be a very disproportionate increase of the enslaved class. Of all vain things, the vainest, and that in which man most shows his impotence and folly, is the taking upon himself to provide for a very distant future—at all events, by any material sacrifice of the present. Though experience has shown that revolutions and political movements—unless when they have been conducted with the most guarded caution and moderation—have generally terminated in results just the opposite of what was expected from them, the angry ape will still play his fantastic tricks, and put in motion machinery, the action of which he no more comprehends or foresees than he comprehends the mysteries of infinity. The insect that is borne upon the current, will fancy that he directs its course. Besides the fear of insurrection and servile war, there is also alarm lest when their numbers shall be greatly increased, their labor will become utterly unprofitable, so that it will be equally difficult for the master to retain and support them, or to get rid of them. But at what age of the

world is this likely to happen? At present, it may be said that almost the whole of the southern portion of this continent is to be subdued to cultivation; and in the order of providence, this is the task allotted to them. For this purpose, more labor will be required for generations to come than they will be able to supply. When that task is accomplished, there will be many objects to which their labor may be directed.

At present they are employed in accumulating individual wealth, and this in one way, to wit, as agricultural laborers; and this is perhaps the most useful purpose to which their labor can be applied. The effect of slavery has not been to counteract the tendency to dispersion, which seems epidemical among our countrymen, invited by the unbounded extent of fertile and unexhausted soil, though it counteracts many of the evils of dispersion. All the customary trades, professions, and employments, except the agricultural, require a condensed population for their profitable exercise. The agriculturist who can command no labor but that of his own hands or that of his family, must remain comparatively poor and rude. He who acquires wealth by the labor of slaves, has the means of improvement for himself and his children. He may have a more extended intercourse, and consequently means of information and refinement, and may seek education for his children where it may be found. I say, what is obviously true, that he has the means of obtaining those advantages; but I say nothing to palliate or excuse the conduct of him who, having such means, neglects to avail himself of them.

I believe it to be true, that in consequence of our dispersion, though individual wealth is acquired, the face of the country is less adorned and improved by useful and ornamental public works, than in other societies of more condensed population, where there is less wealth. But this is an effect of that which constitutes perhaps our most conspicuous advantage. Where population is condensed, they must have the evils of condensed population, and among these is the difficulty of finding profitable employment for capital. He who has accumulated even an inconsiderable sum, is often puzzled to know what use to make of it. Ingenuity is therefore tasked to cast about for every enterprise which may afford a chance of profitable investment. Works useful and ornamental to the country are thus undertaken and accomplished, and though the proprietors may fail of profit, the community no less receives the benefit. Among us, there is no such difficulty. A safe and profitable method of investment is offered to every one who has capital to dispose of, which is further recommended to his feelings by the sense of independence and the comparative leisure which the employment affords

to the proprietor engaged in it. It is for this reason that few of our citizens engage in the pursuits of commerce. Though these may be more profitable, they are also more hazardous and more laborious.

When the demand for agricultural labor shall be fully supplied, then of course the labor of slaves will be directed to other employments and enterprises. Already it begins to be found, that in some instances it may be used as profitably in works of public improvement. As it becomes cheaper and cheaper, it will be applied to more various purposes and combined in larger masses. It may be commanded and combined with more facility than any other sort of labor; and the laborer, kept in stricter subordination, will be less dangerous to the security of society than in any other country, which is crowded and overstocked with a class of what are called free laborers. Let it be remembered, that all the great and enduring monuments of human art and industry—the wonders of Egypt, the everlasting works of Rome—were created by the labor of slaves. There will come a stage in our progress when we shall have facilities for executing works as great as any of these—more useful than the pyramids—not less magnificent than the sea of Moëris. What the end of all is to be; what mutations lie hid in the womb of the distant future; to what convulsions our societies may be exposed; whether the master, finding it impossible to live with his slaves, may not be compelled to abandon the country to them; of all this it were presumptuous and vain to speculate.

I have hitherto, as I proposed, considered it as a naked, abstract question of the comparative good and evil of the institution of slavery. Very far different indeed is the practical question presented to us, when it is proposed to get rid of an institution which has interwoven itself with every fibre of the body politic; which has formed the habits of our society, and is consecrated by the usage of generations. If this be not a vicious prescription, which the laws of God forbid to ripen into right, it has a just claim to be respected by all tribunals of man. If the negroes were now free, and it were proposed to enslave them, then it would be incumbent on those who proposed the measure to show clearly that their liberty was incompatible with the public security. When it is proposed to innovate on the established state of things, the burthen is on those who propose the innovation, to show that advantage will be gained from it. There is no reform, however necessary, wholesome or moderate, which will not be accompanied with some degree of inconvenience, risk or suffering. Those who acquiesce in the state of things which they found existing, can hardly be thought criminal. But most deeply criminal are they who give rise to

the enormous evil with which great revolutions in society are always attended, without the fullest assurance of the greater good to be ultimately obtained. But if it can be made to appear, even probably, that no good will be obtained, but that the results will be evil and calamitous as the process, what can justify such innovations? No human being can be so mischievous, if acting conscientiously, none can be so wicked, as those who, finding evil in existing institutions, rush blindly upon change, unforeseeing and reckless of consequences, and leaving it to chance or fate to determine whether the end shall be improvement, or greater and more intolerable evil. Certainly the instincts of nature prompt to resist intolerable oppression. For this resistance no rule can be prescribed, but it must be left to the instincts of nature. To justify it, however, the insurrectionists should at least have a reasonable probability of success, and be assured that their condition will be improved by success. But most extraordinary is it, when those who complain and clamor are not those who are supposed to feel the oppression, but persons at a distance from them, and who can hardly at all appreciate the good or evil of their situation. It is the unalterable condition of humanity, that men must achieve civil liberty for themselves. The assistance of allies has sometimes enabled nations to repel the attacks of foreign power; never to conquer liberty as against their own internal government.

In one thing I concur with the abolitionists: that if emancipation is to be brought about, it is better that it should be immediate and total. But let us suppose it to be brought about in any manner, and then inquire what would be the effects.

The first and most obvious effect would be to put an end to the cultivation of our great southern staple. And this would be equally the result, if we suppose the emancipated negroes to be in no way distinguished from the free laborers of other countries, and that their labor would be equally effective. In that case, they would soon cease to be laborers for hire, but would scatter themselves over our unbounded territory, to become independent land-owners themselves. The cultivation of the soil on an extensive scale can only be carried on where there are slaves, or in countries superabounding with free labor. No such operations are carried on in any portion of our own country where there are not slaves. Such are carried on in England, where there is an overflowing population and intense competition for employment. And our institutions seem suited to the exigencies of our respective situations. There, a much greater number of laborers is required at one season of the year than at another, and the farmer may enlarge or diminish the quantity of labor he employs, as circumstances may

require. Here, about the same quantity of labor is required at every season, and the planter suffers no inconvenience from retaining his laborers throughout the year. Imagine an extensive rice or cotton plantation cultivated by free laborers, who might perhaps strike for an increase of wages at a season when the neglect of a few days would insure the destruction of the whole crop: even if it were possible to procure laborers at all, what planter would venture to carry on his operations under such circumstances? I need hardly say, that these staples cannot be produced to any extent where the proprietor of the soil cultivates it with his own hands. He can do little more than produce the necessary food for himself and his family.

And what would be the effect of putting an end to the cultivation of these staples, and thus annihilating at a blow two thirds or three fourths of our foreign commerce? Can any sane mind contemplate such a result without terror? I speak not of the utter poverty and misery to which we ourselves would be reduced, and the desolation which would overspread our own portion of the country. Our slavery has not only given existence to millions of slaves within our own territories, it has given the means of subsistence, and therefore existence, to millions of freemen in our confederate states; enabling them to send forth their swarms, to overspread the plains and forests of the west, and appear as the harbingers of civilization. The products of the industry of those states are in general similar to those of the civilized world, and are little demanded in their markets. By exchanging them for ours, which are every where sought for, the people of these states are enabled to acquire all the products of art and industry, all that contributes to convenience or luxury, or gratifies the taste or the intellect, which the rest of the world can supply. Not only on our own continent, but on the other, it has given existence to hundreds of thousands, and the means of comfortable subsistence to millions. A distinguished citizen of our own state, than whom none can be better qualified to form an opinion, has lately stated that our great staple, cotton, has contributed more than any thing else of later times to the progress of civilization. By enabling the poor to obtain cheap and becoming clothing, it has inspired a taste for comfort, the first stimulus to civilization. Does not *self-defense* then demand of us steadily to resist the abrogation of that which is productive of so much good? It is more than self-defense. It is to defend millions of human beings, who are far removed from us, from the intensest suffering, if not from being struck out of existence. It is the defense of human civilization.

But this is but a small part of the evil which would be occasioned. After President

Dew, it is unnecessary to say a single word on the practicability of colonizing our slaves. The two races, so widely separated from each other by the impress of nature, must remain together in the same country. Whether it be accounted the result of prejudice or reason, it is certain that the two races will not be blended together so as to form a homogeneous population. To one who knows any thing of the nature of man and human society, it would be unnecessary to argue that this state of things cannot continue; but that the one race must be driven out by the other, or exterminated, or again enslaved. I have argued on the supposition that the emancipated negroes would be as efficient as other free laborers. But whatever theorists, who know nothing of the matter, may think proper to assume, we well know that this would not be so. We know that nothing but the coercion of slavery can overcome their propensity to indolence, and that not one in ten would be an efficient laborer. Even if this disposition were not grounded in their nature, it would be a result of their position. I have somewhere seen it observed, that to be degraded by opinion is a thousand fold worse, so far as the feelings of the individual are concerned, than to be degraded by the laws. They would be thus degraded, and this feeling is incompatible with habits of order and industry. Half our population would at once be paupers. Let an inhabitant of New-York or Philadelphia conceive of the situation of their respective states, if one half of their population consisted of free negroes. The tie which now connects them being broken, the different races would be estranged from each other, and hostility would grow up between them. Having the command of their own time and actions, they could more effectually combine insurrection and provide the means of rendering it formidable. Released from the vigilant superintendence which now restrains them, they would infallibly be led from petty to greater crimes, until all life and property would be rendered insecure. Aggression would beget retaliation, until open war, and that a war of extermination, were established. From the still remaining superiority of the white race, it is probable that they would be the victors, and if they did not exterminate, they must again reduce the others to slavery—when they could be no longer fit to be either slaves or freemen. It is not only in self-defense, in defense of our country and of all that is dear to us, but in defense of the slaves themselves, that we refuse to emancipate them.

If we suppose them to have political privileges, and to be admitted to the elective franchise, still worse results may be expected. It is hardly necessary to add any thing to what has been said by Mr. Paulding on this subject, who has treated it fully. It is already

known, that if there be a class unfavorably distinguished by any peculiarity from the rest of society, this distinction forms a tie which binds them to act in concert, and they exercise more than their due share of political power and influence; and still more as they are of inferior character and looser moral principle. Such a class form the very material for demagogues to work with. Other parties court them and concede to them. So it would be with the free blacks in the case supposed. They would be used by unprincipled politicians, of irregular ambition, for the advancement of their schemes, until they should give them political power and importance beyond even their own intentions. They would be courted by excited parties in their contests with each other. At some time, they may perhaps attain political ascendancy, and this is more probable, as we may suppose that there will have been a great emigration of whites from the country. Imagine the government of such legislators. Imagine then the sort of laws that will be passed, to confound the invidious distinction which has so long been assumed over them, and if possible to obliterate the very memory of it. These will be resisted. The blacks will be tempted to avenge themselves by oppression and proscription of the white race, for their long superiority. Thus matters will go on, until universal anarchy, or kakistocracy, the government of the worst, is fully established. I am persuaded that if the spirit of evil should devise or send abroad upon the earth all possible misery, discord, horror and atrocity, he could contrive no scheme so effectual as the emancipation of negro slaves within our country.

The most feasible scheme of emancipation, and that which I verily believe would involve the least danger and sacrifice, would be that the *entire* white population should emigrate, and abandon the country to their slaves. Here would be triumph to philanthropy. This wide and fertile region would be again restored to ancient barbarism—to the worst of barbarism—barbarism corrupted and depraved by intercourse with civilization. And this is the consummation to be wished, upon a speculation that, in some distant future age, they may become so enlightened and improved as to be capable of sustaining a position among the civilized races of the earth. But I believe moralists allow men to defend their homes and their country, even at the expense of the lives and liberties of others.

Will any philanthropist say that the evils, of which I have spoken, would be brought about only by the obduracy, prejudices and overweening self-estimation of the whites in refusing to blend the races by marriage, and so create a homogeneous population? But what if it be not prejudice, but truth and nature, and right reason, and just moral feel-

ing? As I have before said, throughout the whole of nature, like attracts like, and that which is unlike repels. What is it that makes so unspeakably loathsome crimes not to be named, and hardly alluded to? Even among the nations of Europe, so nearly homogeneous, there are some peculiarities of form and feature, mind and character, which may be generally distinguished by those accustomed to observe them. Though the exceptions are numerous, I will venture to say that not in one instance in a hundred is the man of sound and unsophisticated tastes and propensities so likely to be attracted by the female of a foreign stock as by one of his own, who is more nearly conformed to himself. Shakspeare spoke the language of nature, when he made the senate and people of Venice attribute to the effect of witchcraft Desdemona's passion for Othello—though, as Coleridge has said, we are to conceive of him not as a negro, but as a high-bred Moorish chief.

If the negro race, as I have contended, be inferior to our own in mind and character, marked by inferiority of form and features, then ours would suffer deterioration from such intermixture. What would be thought of the moral conduct of the parent who should voluntarily transmit disease or fatuity or deformity to his offspring? If man be the most perfect work of the Creator, and the civilized European man the most perfect variety of the human race, is he not criminal who would desecrate and deface God's fairest work; estranging it further from the image of himself, and conforming it more nearly to that of the brute? I have heard it said, as if it afforded an argument, that the African is as well satisfied of the superiority of his own complexion, form and features, as we can be of ours. If this were true, as it is not, would any one be so recreant to his own civilization, as to say that his opinion ought to weigh against ours; that there is no universal standard of truth and grace and beauty; that the Hottentot Venus may perchance possess as great perfection of form as the Medicean? It is true, the licentious passions of men overcome the natural repugnance, and find transient gratification in intercourse with females of the other race. But this is a very different thing from making her the associate of life, the companion of the bosom and the hearth. Him who would contemplate such an alliance for himself, or regard it with patience when proposed for a son, or daughter, or sister, we should esteem a degraded wretch; with justice, certainly, if he were found among ourselves; and the estimate would not be very different if he were found in Europe. It is not only in defense of ourselves, of our country, and of our own generation, that we refuse to emancipate our slaves, but to defend our posterity and race from degeneracy and degradation.

Are we not justified then in regarding as

criminals, the fanatical agitators whose efforts are intended to bring about the evils I have described? It is sometimes said that their zeal is generous and disinterested, and that their motives may be praised, though their conduct be condemned. But I have little faith in the good motives of those who pursue bad ends. It is not for us to scrutinize the hearts of men, and we can only judge of them by the tendency of their actions. There is much truth in what was said by Coleridge: "I have never known a trader in philanthropy who was not wrong in heart somehow or other. Individuals so distinguished are usually unhappy in their family relations—men not benevolent or beneficent to individuals, but almost hostile to them, yet lavishing money and time on the race—the abstract notion." The purient love of notoriety actuates some. There is much luxury in sentiment, especially if it can be indulged at the expense of others; and if there be added some share of envy or malignity, the temptation to indulgence is almost irresistible. But certainly they may be justly regarded as criminal, who obstinately shut their eyes and close their ears to all instruction with respect to the true nature of their actions.

It must be manifest to every man of sane mind that it is impossible for them to achieve ultimate success; even if every individual in our country, out of the limits of slaveholding states, were united in their purposes. They cannot have even the miserable triumph of St. Domingo, of advancing through scenes of atrocity, blood and massacre to the restoration of barbarism. They may agitate and perplex the world for a time. They may excite to desperate attempts and particular acts of cruelty and horror, but these will always be suppressed or avenged at the expense of the objects of their truculent philanthropy. But short of this, they can hardly be aware of the extent of the mischief they perpetrate. As I have said, their opinions, by means to us inscrutable, do very generally reach our slave population. What human being, if unfavorably distinguished by outward circumstances, is not ready to believe when he is told that he is the victim of injustice? Is it not cruelty to make men restless and dissatisfied in their condition, when no effort of theirs can alter it? The greatest injury is done to their characters, as well as to their happiness. Even if no such feelings or designs should be entertained or conceived by the slave, they will be attributed to him by the master, and all his conduct scanned with a severe and jealous scrutiny. Thus distrust and aversion are established, where, but for mischievous interference, there would be confidence and goodwill, and a sterner control is exercised over the slave who thus becomes the victim of his cruel advocates.

An effect is sometimes produced on the

mind of slaveholders, by the publications of the self-styled philanthropists, and their judgments staggered and consciences alarmed. It is natural that the oppressed should hate the oppressor. It is still more natural that the oppressor should hate his victim. Convince the master that he is doing injustice to his slave, and he at once begins to regard him with distrust and malignity. It is a part of the constitution of the human mind, that when circumstances of necessity or temptation induce men to continue in the practice of what they believe to be wrong, they become desperate and reckless of the degree of wrong. I have formerly heard of a master who accounted for his practicing much severity upon his slaves, and exacting from them an unusual degree of labor, by saying that the thing (slavery) was altogether wrong, and therefore it was well to make the greatest possible advantage out of it. This agitation occasions some slaveholders to hang more loosely on their country. Regarding the institution as of questionable character, condemned by the general opinion of the world, and one which must shortly come to an end, they hold themselves in readiness to make their escape from the evil which they anticipate. Some sell their slaves to new masters, (always a misfortune to the slave,) and remove themselves to other societies, of manners and habits uncongenial to their own. And though we may suppose that it is only the weak and the timid who are liable to be thus affected, still it is no less an injury and public misfortune. Society is kept in an uneasy and restless state, and every sort of improvement is retarded.

Some projectors suggest the education of slaves, with a view to prepare them for freedom, as if there were any method of a man's being educated to freedom but by himself. The truth is, however, that supposing that they are shortly to be emancipated, and that they have the capacities of any other race, they are undergoing the very best education which it is possible to give. They are in the course of being taught habits of regular and patient industry, and this is the first lesson which is required. I suppose that their most zealous advocates would not desire that they should be placed in the high places of society immediately upon their emancipation, but that they should begin their course of freedom as laborers, and raise themselves afterwards as their capacities and characters might enable them. But how little would what are commonly called the rudiments of education add to their qualifications as laborers! But for the agitation which exists, however, their education would be carried further than this. There is a constant tendency in our society to extend the sphere of their employments, and consequently to give them the information which is necessary to the discharge of those

employments. And this for the most obvious reason, it promotes the master's interest. How much would it add to the value of a slave, that he should be capable of being employed as a clerk, or be able to make calculations as a mechanic? In consequence, however, of the fanatical spirit which has been excited, it has been thought necessary to repress this tendency by legislation, and to prevent their acquiring the knowledge of which they might make a dangerous use. If this spirit were put down, and we restored to the consciousness of security, this would be no longer necessary, and the process of which I have spoken would be accelerated. Whenever indications of superior capacity appeared in a slave, it would be cultivated; gradual improvement would take place, until they might be engaged in as various employments as they were among the ancients—perhaps even liberal ones. Thus, if in the adorable providence of God, at a time and in a manner which we can neither foresee nor conjecture, they are to be rendered capable of freedom and to enjoy it, they would be prepared for it in the best and most effectual, because in the most natural and gradual manner. But fanaticism hurries to its effect at once. I have heard it said, God does good, but it is by imperceptible degrees; the devil is permitted to do evil, and he does it in a hurry. The beneficent processes of nature are not apparent to the senses. You cannot see the plant grow, or the flower expand. The volcano, the earthquake, and the hurricane, do their work of desolation in a moment. Such would be the desolation, if the schemes of fanaticism were permitted to have effect. They do all that in them lies to thwart the beneficent purposes of Providence. The whole tendency of their efforts is to aggravate present suffering, and to cut off the chance of future improvement, and in all their bearings and results have produced, and are likely to produce, nothing but "pure, unadorned, deplored, defecated evil."

NEGRO SLAVERY AT THE SOUTH.—LETTERS OF GOVERNOR HAMMOND TO THOMAS CLARKSON.—INTRODUCTION; THE SLAVE TRADE, AND FUTILE ATTEMPTS TO ABOLISH IT; PREScriptive RIGHT; SLAVERY IN THE ABSTRACT; IN ITS MORAL AND RELIGIOUS ASPECT; IN ITS POLITICAL INFLUENCES, AS AFFECTING PUBLIC ORDER, AND THE SAFETY AND POWER OF THE STATE.—SIR: I received, a short time ago, a letter from the Rev. Willoughby M. Dickinson, dated at your residence, "Playford Hall, near Ipswich, 26th November, 1844," in which was inclosed a copy of your circular letter, addressed to professing Christians in our northern states, having no concern with slavery, and to others there. I presume that Mr. Dickinson's letter was written with your knowledge, and the document inclosed with your

consent and approbation. I therefore feel that there is no impropriety in my addressing my reply directly to yourself, especially as there is nothing in Mr. Dickinson's communication requiring serious notice. Having abundant leisure, it will be a recreation to devote a portion of it to an examination and free discussion of the question of slavery as it exists in our southern states; and since you have thrown down the gauntlet to me, I do not hesitate to take it up.

Familiar as you have been with the discussions of this subject in all its aspects, and under all the excitements it has occasioned for sixty years past, I may not be able to present much that will be new to you. Nor ought I to indulge the hope of materially affecting the opinions you have so long cherished, and so zealously promulgated. Still, time and experience have developed facts, constantly furnishing fresh tests to opinions formed sixty years since, and continually placing this great question in points of view which could scarcely occur to the most consummate intellect even a quarter of a century ago; and which may not have occurred yet to those whose previous convictions, prejudices, and habits of thought have thoroughly and permanently biased them to one fixed way of looking at the matter; while there are peculiarities in the operation of every social system, and special local as well as moral causes materially affecting it, which no one, placed at the distance you are from us, can fully comprehend or properly appreciate. Besides, it may be, possibly, a novelty to you to encounter one who conscientiously believes the domestic slavery of these states to be not only an inexorable necessity for the present, but a moral and humane institution, productive of the greatest political and social advantages, and who is disposed, as I am, to defend it on these grounds.

I do not propose, however, to defend the African slave trade. That is no longer a question. Doubtless great evils arise from it as it has been, and is now conducted; unnecessary wars and cruel kidnapping in Africa; the most shocking barbarities in the Middle Passage; and perhaps a less humane system of slavery in countries continually supplied with fresh laborers at a cheap rate. The evils of it, however, it may be fairly presumed, are greatly exaggerated. And if I might judge of the truth of transactions stated as occurring in this trade, by that of those reported as transpiring among us, I should not hesitate to say, that a large proportion of the stories in circulation are unfounded, and most of the remainder highly colored.

On the passage of the act of Parliament prohibiting this trade to British subjects, rests what you esteem the glory of your life. It required twenty years of arduous agitation, and the intervening extraordinary political events, to convince your countrymen, and

among the rest your pious king, of the expediency of the measure; and it is but just to say, that no one individual rendered more essential service to the cause than you did. In reflecting on the subject, you cannot but often ask yourself, What after all has been accomplished; how much human suffering has been averted; how many human beings have been rescued from transatlantic slavery? And on the answers you can give these questions must, in a great measure, I presume, depend the happiness of your life. In framing them, how frequently must you be reminded of the remark of Mr. Grosvenor, in one of the early debates upon the subject, which I believe you have yourself recorded, "that he had twenty objections to the abolition of the slave trade: the first was, *that it was impossible*—the rest he need not give." Can you say to yourself or to the world, that this *first* objection of Mr. Grosvenor has been yet confuted? It was estimated at the commencement of your agitation in 1787, that forty-five thousand Africans were annually transported to America and the West Indies. And the mortality of the Middle Passage, computed by some at five, is now admitted not to have exceeded nine per cent. Notwithstanding your act of parliament, the previous abolition by the United States, and that all the powers in the world have subsequently prohibited this trade (some of the greatest of them declaring it piracy, and covering the African seas with armed vessels to prevent it)—Sir Thomas Fowell Buxton, a coadjutor of yours, declared, in 1840, that the number of Africans now annually sold into slavery beyond the sea amounts, at the very least, to one hundred and fifty thousand souls; while the mortality of the Middle Passage has increased, in consequence of the measures taken to suppress the trade, to twenty-five or thirty per cent. And of the one hundred and fifty thousand slaves who have been captured and liberated by British men-of-war since the passage of your act, Judge Jay, an American abolitionist, asserts that one hundred thousand, or two thirds, have perished between their capture and liberation. Does it not really seem that Mr. Grosvenor was a prophet? That though nearly all the "impossibilities" of 1787 have vanished, and become as familiar facts as our household customs, under the magic influence of steam, cotton, and universal peace, yet this wonderful prophecy still stands, defying time and the energy and genius of mankind? Thousands of valuable lives and fifty millions of pounds sterling have been thrown away by your government in fruitless attempts to overturn it. I hope you have not lived too long for your own happiness, though you have been thus spared to see that, in spite of all your toils and those of your fellow laborers, and the accomplishment of all that human agency could do, the African slave-trade has increased threefold under your own

eyes—more rapidly, perhaps, than any other ancient branch of commerce; and that your efforts to suppress it have effected *nothing* more than a threefold increase of its horrors. There is a God who rules this world—all-powerful—far-seeing. He does not permit his creatures to foil his designs. It is He who, for his all-wise, though to us often inscrutable purposes, throws “impossibilities” in the way of our fondest hopes and most strenuous exertions. Can you doubt this?

Experience having settled the point, that this trade *cannot be abolished by the use of force*, and that blockading squadrons only serve to make it more profitable and more cruel, I am surprised that the attempt is persisted in, unless it serves as a cloak to other purposes. It would be far better than it now is, for the African, if the trade was free from all restrictions, and left to the mitigation and decay which time and competition would surely bring about. If kidnapping, both secretly and by war made for the purpose, could be by any means prevented in Africa, the next greatest blessing you could bestow upon that country would be to transport its actual slaves in comfortable vessels across the Atlantic. Though they might be perpetual bondsmen, still they would emerge from darkness into light—from barbarism to civilization—from idolatry to Christianity—in short, from death to life.

But let us leave the African slave-trade, which has so signally defeated the *philanthropy* of the world, and turn to American slavery, to which you have now directed our attention, and against which a crusade has been preached as enthusiastic and ferocious as that of Peter the Hermit—destined, I believe, to be about as successful. And here, let me say, there is a vast difference between the two, though you may not acknowledge it. The wisdom of ages has concurred in the justice and expediency of establishing rights by prescriptive use, however tortuous in their origin they may have been. You would deem a man insane, whose keen sense of equity would lead him to denounce your right to the lands you hold, and which, perhaps, you inherited from a long line of ancestry, because your title was derived from a Saxon or Norman conqueror, and your lands were originally wrested by violence from the vanquished Britons. And so would the New-England abolitionist regard any one who would insist that he should restore his farm to the descendants of the slaughtered red men, to whom God had as clearly given it as he gave life and freedom to the kidnapped African. That time does not consecrate wrong is a fallacy which all history exposes, and which the best and wisest men of all ages and professions of religious faith have practically denied. The means, therefore, whatever they may have been, by which the African race now in this

country have been reduced to slavery, cannot affect us, since they are our property, as your land is yours, by inheritance, or purchase and prescriptive right. You will say that man cannot hold *property in man*. The answer is, that he can and *actually does* hold property in his fellow all the world over, in a variety of forms, and *has always done so*. I will show presently his authority for doing it.

If you were to ask me whether I am an advocate of slavery in the abstract, I should probably answer that I am not, according to my understanding of the question. I do not like to deal in abstractions. It seldom leads to any useful ends. There are few universal truths. I do not now remember any single moral truth universally acknowledged. We have no assurance that it is given to our finite understanding to comprehend abstract moral truth. Apart from the revelation and the inspired writings, what ideas should we have even of God, salvation, and immortality? Let the heathen answer. Justice itself is impalpable as an abstraction, and abstract liberty the merest phantasy that ever amused the imagination. This world was made for man, and man for the world as it is. Ourselves, our relations with one another, and with all matter, are real, not ideal. I might say that I am no more in favor of slavery in the abstract, than I am of poverty, disease, deformity, idiocy, or any other inequality in the condition of the human family; that I love perfection, and I think I should enjoy a millennium such as God has promised. But what would it amount to? A pledge that I would join you to set about eradicating those apparently inevitable evils of our nature, in equalizing the condition of all mankind, consummating the perfection of our race, and introducing the millennium? By no means. To effect these things belongs exclusively to a higher power. And it would be well for us to leave the Almighty to perfect his own works and fulfil his own covenants. Especially, as the history of the past shows how entirely futile all human efforts have proved, when made for the purpose of aiding him in carrying out even his revealed designs, and how invariably he has accomplished them by unconscious instruments, and in the face of human expectation. Nay, more, that every attempt which has been made by fallible man to extort from the world obedience to his “abstract” notions of right and wrong, has been invariably attended with calamities, dire and extended, just in proportion to the breadth and vigor of the movement. On slavery in the abstract, then, it would not be amiss to have as little as possible to say. Let us contemplate it as it is; and thus contemplating it, the first question we have to ask ourselves is, whether it is contrary to the will of God, as revealed to us in his Holy Scriptures—the only certain means given us to ascertain his will. If it is, then slavery

is a sin; and I admit at once, that every man is bound to set his face against it, and to emancipate his slaves should he hold any.

Let us open these Holy Scriptures. In the twentieth chapter of Exodus, seventeenth ver., I find the following word: "Thou shalt not covet thy neighbor's house, thou shalt not covet thy neighbor's wife, nor his man-servant, nor his maid-servant, nor his ox, nor his ass, nor any thing that is thy neighbor's;" which is the tenth of those commandments that declare the essential principles of the great moral law delivered to Moses by God himself. Now, discarding all technical and verbal quibbling as wholly unworthy to be used in interpreting the Word of God, what is the plain meaning, undoubted intent, and true spirit of this commandment? Does it not emphatically and explicitly forbid you to disturb your neighbor in the enjoyment of his property; and more especially of that which is here specifically mentioned as being lawfully and by this commandment sacredly made his? Prominent in the catalogue stands "his man-servant and his maid-servant," who are thus distinctly *consecrated as his property*, and guaranteed to him for his exclusive benefit in the most solemn manner. You attempt to avert the otherwise irresistible conclusion, that slavery was thus ordained by God, by declaring that the word "slave" is not used here, and is not to be found in the Bible. And I have seen many learned dissertations on this point from abolition pens. It is well known that both the Hebrew and Greek words translated "servant" in the Scriptures, mean also and most usually "slave." The use of the one word instead of the other was a mere matter of taste with the translators of the Bible, as it has been with all the commentators and religious writers, the latter of whom have, I believe, for the most part, adopted the term "slave," or used both terms indiscriminately. If, then, these Hebrew and Greek words include the idea of both systems of servitude, the conditional and unconditional, they should, as the major includes the minor proposition, be always translated "slaves," unless the sense of the whole text forbids it. The real question, then, is, what idea is intended to be conveyed by the words used in the commandment quoted? And it is clear to my mind, that as no limitation is affixed to them, and the express intention was to secure to mankind the peaceful enjoyment of every species of property, that the terms "men-servants and maid-servants" include all classes of servants, and establish a lawful, exclusive and indefeasible interest equally in the "Hebrew brother who shall go out in the seventh year," and "yearly hired servant," and "those purchased from the heathen round about," who were to be "bondmen for ever," as the *property of their fellow-man*.

You cannot deny that there were among the Hebrews "bondmen for ever." You cannot

deny that God especially authorized his chosen people to purchase "bondmen for ever" from the heathen, as recorded in the *twenty-fifth chapter of Leviticus*, and that they are there designated by the very Hebrew word used in the tenth commandment. Nor can you deny that a "BONDMAN FOR EVER" is a "SLAVE": yet you endeavor to hang an argument of immortal consequence upon the wretched subterfuge, that the precise word "slave" is not to be found in the *translation of the Bible*. As if the translators were canonical expounders of the Holy Scriptures, and *their words, not God's meaning*, must be regarded as his revelation.

It is in vain to look to Christ or any of his apostles, to justify such blasphemous perversions of the Word of God. Although slavery in its most revolting form was every where visible around them, no visionary notions of piety or philanthropy ever tempted them to gild the Law, even to mitigate the cruel severity of the existing system. On the contrary, regarding slavery as an *established, as well as inevitable condition of human society*, they never hinted at such a thing as its termination on earth, any more than that "the poor may cease out of the land," which God affirms to Moses shall never be; and they exhort "all servants under the yoke" to "count their masters as worthy of all honor;" "to obey them in all things according to the flesh; not with eye-service as men-pleasers, but in singleness of heart, fearing God; not only the good and gentle, but also the froward; for what glory is it, if, when ye are buffeted for your faults, ye shall take it patiently? but if, when ye do well and suffer for it, ye take it patiently, this is acceptable to God." St. Paul actually apprehended a runaway slave and sent him to his master! Instead of deriving from the Gospel any sanction for the work you have undertaken, it would be difficult to imagine sentiments and conduct more strikingly in contrast, than those of the Apostles and Abolitionists.

It is impossible, therefore, to suppose that slavery is contrary to the will of God. It is equally absurd to say that American slavery differs in form or principle from that of the chosen people. *We accept the Bible terms as the definition of our slavery, and its precepts as the guide of our conduct*. We desire nothing more. Even the right to "buffet," which is esteemed so shocking, finds its express license in the Gospel. 1 Peter ii. 20. Nay, what is more, God directs the Hebrews to "bore holes in the ears of their brothers" to mark them, when under certain circumstances they become *perpetual slaves*. Exodus xxi. 6.

I think, then, I may safely conclude, and I firmly believe, that American slavery is not only not a sin, but especially commanded by God through Moses, and approved by

Christ through his Apostles. And here I might close its defense; for what God ordains, and Christ sanctifies, should surely command the respect and toleration of man. But I fear there has grown up, in our time, a transcendental religion, which is throwing even transcendental philosophy into the shade—a religion too pure and elevated for the Bible, which seeks to erect among men a higher standard of morals than the Almighty has revealed or our Saviour preached; and which is probably destined to do more to impede the extension of God's kingdom on earth than all the infidels who have ever lived. Error is error. It is as dangerous to deviate to the right hand as to the left. And when men, professing to be holy men, and who are by numbers so regarded, declare those things to be sinful which our Creator has expressly authorized and instituted, they do more to destroy his authority among mankind than the most wicked can effect by proclaiming that to be innocent which he has forbidden. To this self-righteous and self-exalted class belong all the abolitionists whose writings I have read. With them, it is no end of the argument to prove your propositions by the texts of the Bible, interpreted according to its plain and palpable meaning, and as understood by all mankind for three thousand years before their time. They are more ingenious at construing and interpolating to accommodate it to their new-fangled and ethereal code of morals, than ever were Voltaire or Hume in picking it to pieces to free the world from what they considered a delusion. When the abolitionists proclaim "man-stealing" to be a sin, and show me that it is so written down by God, I admit them to be right, and shudder at the idea of such a crime. But when I show them that to hold "bondmen for ever" is ordained by God, *they deny the Bible, and set up in its place a law of their own making.* I must then cease to reason with them on this branch of the question. Our religion differs as widely as our manners. The great Judge, in our day of final account, must decide between us.

Turning from our considerations of slaveholding in its relations to man as an accountable being, let us examine it in its influence on his political and social state. Though, being foreigners to us, you are in no wise entitled to interfere with the civil institutions of this country, it has become quite common for your countrymen to decry slavery as an enormous political evil to us, and even to declare that our northern states ought to withdraw from the confederacy rather than continue or be contaminated by it. The American abolitionists appear to concur fully in these sentiments, and a portion at least of them are incessantly threatening to dissolve the Union. Nor should I be at all surprised if they succeed. It would not be difficult, in my

opinion, to conjecture which region, the north or south, would suffer most by such an event. For one, I should not object, by any means, to cast my lot in a confederacy of states, whose citizens might all be slaveholders.

I endorse, without reserve, the much-abused sentiment of Governor McDuffie, that "slavery is the corner-stone of our republican edifice"; while I repudiate as ridiculously absurd, that much lauded but no where accredited dogma of Mr. Jefferson, "that all men are born equal." No society has ever yet existed, and I have already incidentally quoted the highest authority to show that none ever will exist, without a natural variety of classes. The most marked of these must, in a country like ours, be the rich and poor, the educated and the ignorant. It will scarcely be disputed that the very poor have less leisure to prepare themselves for a proper discharge of public duties than the rich; and that the ignorant are wholly unfit for them at all. In all countries save ours, these two classes, or the poor rather, who are presumed to be necessarily ignorant, are by law expressly excluded from all participation in the management of public affairs. In a republican government this cannot be done. Universal suffrage, though not essential in theory, seems to be in fact a necessary appendage to a republican system. Where universal suffrage obtains, it is obvious that the government is in the hands of a numerical majority; and it is hardly necessary to say, that in every part of the world more than half the people are ignorant and poor. Though no one can look upon poverty as a crime, and we do not generally here regard it as an objection to a man in his individual capacity; still, it must be admitted that it is a wretched and insecure government which is administered by its most ignorant citizens, and those who have the least at stake under it. Though intelligence and wealth have great influence here as every where, in keeping in check reckless and unenlightened numbers, yet it is evident to close observers, if not to all, that these are rapidly usurping all power in the non-slaveholding states, and threaten a fearful crisis in republican institutions there at no remote period. In the slaveholding states, however, nearly one half of the whole population, and those the poorest and the most ignorant, have no political influence whatever, because they are slaves. Of the other half a large proportion are both educated and independent in their circumstances, while those who unfortunately are not so, being still elevated far above the mass, are higher toned and more deeply interested in preserving a stable and well ordered government, than the same class in any other country. Hence, slavery is truly the "corner-stone" and foundation of every well-designed and durable "republican edifice."

With us, every citizen is concerned in the

maintenance of order, and in promoting honesty and industry among those of the lowest class who are our slaves; and our habitual vigilance renders standing armies, whether of soldiers or policemen, entirely unnecessary. Small guards in our cities, and occasional patrols in the country, insure us a repose and security known no where else. You cannot be ignorant that, excepting the United States, there is no country in the world whose existing government would not be overturned in a month but for its standing armies, maintained at an enormous and destructive cost to those whom they are destined to overawe, so rampant and combative is the spirit of discontent wherever nominal free labor prevails, with its ostensible privileges, and its dismal servitude. Nor will it be long before the "*Free States*" of this Union will be compelled to introduce the same expensive machinery, to preserve order among their "free and equal" citizens. Already has Philadelphia organized a permanent battalion for this purpose; New-York, Boston, and Cincinnati will soon follow her example; and then the smaller towns and densely populated counties. The intervention of their militia to repress violations of the peace is becoming a daily affair. A strong government, after some of the old fashions, though probably with a new name, sustained by the force of armed mercenaries, is the ultimate destiny of the non-slaveholding section of this confederacy, and one which may not be very distant.

It is a great mistake to suppose, as is generally done abroad, that, in case of war, slavery would be a source of weakness. It did not weaken Rome, nor Athens, nor Sparta, though their slaves were comparatively far more numerous than ours, of the same color, for the most part, with themselves, and large numbers of them familiar with the use of arms. I have no apprehension that our slaves would seize such an opportunity to revolt. The present generation of them, born among us, would never think of such a thing at any time, unless instigated to it by others. Against such instigations we are always on our guard. In time of war we should be more watchful and better prepared to put down insurrections than at any other periods. Should any foreign nation be so lost to every sentiment of civilized humanity as to attempt to erect among us the standard of revolt, or to invade us with black troops for the base and barbarous purpose of stirring up servile war, their efforts would be signally rebuked. Our slaves could not be easily seduced, nor would any thing delight them more than to assist in stripping Cuffee of his regimentals to put him in the cotton-field, which would be the fate of most black invaders, without any prolix form of "apprenticeship." If, as I am satisfied would be the case, our slaves remained peacefully on our plantations, and cultivated

them in time of war, under the superintendence of a limited number of our citizens, it is obvious that we could put forth more strength in such an emergency, at less sacrifice, than any other people of the same numbers. And thus we should in every point of view, "out of this nettle danger, pluck the flower safety."

How far slavery may be an advantage or disadvantage to those not owning slaves, yet united with us in political association, is a question for their sole consideration. It is true that our representation in Congress is increased by it. But so are our taxes; and the non-slaveholding states, being the majority, divide among themselves far the greater portion of the amount levied by the federal government. And I doubt not that when it comes to a close calculation, they will not be slow in finding out that the balance of profit arising from the connection is vastly in their favor.

SLAVERY AND ITS SOCIAL EFFECTS; DUELLING; MOBS; REPUTATION; LICENTIOUSNESS; COMPARATIVE EXPENSE OF FREE AND SLAVE LABOR; TREATMENT OF SLAVES; INSTRUCTION; PUNISHMENTS (CONTINUED).—In a social point of view the abolitionists pronounce slavery to be a monstrous evil. If it was so, it would be our own peculiar concern, and superfluous benevolence in them to lament over it. Seeing their bitter hostility, they might leave us to cope with our own calamities. But they make war upon us out of excess of charity, and attempt to purify by covering us with calumny. You have read, and assisted to circulate, a great deal about affrays, duels, and murders occurring here, and all attributed to the terrible demoralization of slavery. Not a single event of this sort takes place among us, but it is caught up by the abolitionists, and paraded over the world with endless comments, variations, and exaggerations. You should not take what reaches you as a mere sample, and infer that there is a vast deal more you never hear. You hear all, and more than all, the truth.

It is true that the point of honor is recognized throughout the slave region, and that disputes of certain classes are frequently referred for adjustment to the "trial by combat." It would not be appropriate for me to enter, in this letter, into a defense of the practice of duelling, nor to maintain at length that it does not tarnish the character of a people to acknowledge a standard of honor. Whatever evils may arise from it, however, they cannot be attributed to slavery—since the same custom prevails both in France and England. Few of your prime-ministers, of the last half century even, have escaped the contagion, I believe. The affrays of which so much is said, and in which rifles, bowie-knives, and pistols are so prominent, occur mostly in the frontier states of the southwest. They are naturally incidental to the condition of society

as it exists in many sections of these recently settled countries, and will as naturally cease in due time. Adventurers from the older states and from Europe, as desperate in character as they are in fortune, congregate in these wild regions, jostling one another, and often forcing the peaceable and honest into rencontres in self-defense. Slavery has nothing to do with these things. Stability and peace are the first desires of every slaveholder, and the true tendency of the system. It could not possibly exist amid the eternal anarchy and civil broils of the ancient Spanish dominions in America. And for this very reason, domestic slavery has ceased there. So far from encouraging strife, such scenes of riot and bloodshed as have, within the last few years, disgraced our northern cities, and as you have lately witnessed in Birmingham and Bristol and Wales, not only never have occurred, but I will venture to say, never will occur in our slaveholding states. The only thing that can create a mob (as you might call it) here, is the appearance of an abolitionist whom the people assemble to chastise. And this is no more of a mob than a rally of shepherds to chase a wolf out of their pastures would be one.

But we are swindlers and repudiators! Pennsylvania is not a slave State. A majority of the states which have failed to meet their obligations punctually are non-slaveholding; and two thirds of the debt said to be repudiated is owed by these states. Many of the states of this Union are heavily encumbered with debt—none so hopelessly as England. Pennsylvania owes \$22 for each inhabitant—England \$222, counting her paupers in. Nor has there been any repudiation, definite and final, of a lawful debt, that I am aware of. A few states have failed to pay some instalments of interest. The extraordinary financial difficulties which occurred a few years ago account for it. Time will set all things right again. Every dollar of both principal and interest owed by any state, north or south, will be ultimately paid, *unless the abolition of slavery overwhelms us all in one common ruin*. But have no other nations failed to pay? When were the French assignats redeemed? How much interest did your National Bank pay on its immense circulation from 1797 to 1821, during which period that circulation was inconvertible, and for the time repudiated? How much of your national debt has been incurred for money borrowed to meet the interest upon it, thus avoiding delinquency in detail, by insuring inevitable bankruptcy and repudiation in the end? And what sort of operation was that by which your present ministry recently expunged a handsome amount of that debt by substituting, through a process just not compulsory, one species of security for another? I am well aware that the faults of others do not excuse our own, but when failings are

charged to slavery which are shown to occur to equal extent where it does not exist, surely slavery must be acquitted of the accusation.

It is roundly asserted that we are not so well educated nor so religious as elsewhere. I will not go into tedious statistical statements on these subjects. Nor have I, to tell the truth, much confidence in the details of what are commonly set forth as statistics. As to education, you will probably admit that slaveholders should have more leisure for mental culture than most people. And I believe it is charged against them that they are peculiarly fond of power and ambitious of honors. If this be so, as all the power and honors of this country are won mainly by intellectual superiority, it might be fairly presumed that slaveholders would not be neglectful of education. In proof of the accuracy of this presumption I point you to the facts, that our Presidential chair has been occupied for forty-four out of the fifty-six years by slaveholders; that another has been recently elected to fill it for four years more, over an opponent who was a slaveholder also; and that in the federal offices and both Houses of Congress, considerably more than a due proportion of those acknowledged to stand in the first rank are from the south. In this arena the intellects of the free and slave states meet in full and fair competition. Nature must have been unusually bountiful to us, or we have been, at least, reasonably assiduous in the cultivation of such gifts as she has bestowed—unless, indeed, you refer our superiority to moral qualities, which I am sure you will not. More wealthy we are not, nor would mere wealth avail in such rivalry.

The piety of the south is unobtrusive. We think it proves but little, though it is a confident thing for a man to claim that he stands higher in the estimation of his Creator, and is less a sinner, than his neighbor. If vociferation is to carry the question of religion, the north and probably the Scotch have it. Our sects are few, harmonious, pretty much united among themselves, and pursue their avocations in humble peace. In fact, our professors of religion seem to think—whether correctly or not—that it is their duty to do “good in secret,” and to carry their holy comforts to the heart of each individual, without reference to class or color, for his special enjoyment, and not with a view to exhibit their zeal before the world. So far as numbers are concerned, I believe our clergymen, when called on to make a showing, have never had occasion to blush, if comparisons were drawn between the free and slave states. And although our presses do not teem with controversial pamphlets, nor our pulpits shake with excommunicating thunders, the daily walk of our religious communicants furnishes apparently as little food for gossip as is to be found in most other regions. It may be regarded as a mark of

our want of excitability—though that is a quality accredited to us in an eminent degree—that few of the remarkable religious *isms* of the present day have taken root among us. We have been so irreverent as to laugh at Mormonism and Millerism, which have created such commotions further north; and modern prophets have no honor in our country. Shakers, Rappists, Dunkers, Socialists, Fourierists, and the like, keep themselves afar off. Even Puseyism has not yet moved us. You may attribute this to our domestic slavery if you choose. I believe you would do so justly. There is no material here for such characters to operate upon.

But your grand charge is, that licentiousness, in intercourse between the sexes, is a prominent trait of our social system, and that it necessarily arises from slavery. This is a favorite theme with the abolitionists, male and female. Folios have been written on it. It is a common observation, that there is no subject on which ladies of eminent virtue so much delight to dwell, and on which, in especial, learned old maids like Miss Martineau linger with such insatiable relish. They expose it in the slave states with the most minute observance and endless iteration. Miss Martineau, with peculiar gusto, relates a series of scandalous stories, which would have made Boccaccio jealous of her pen, but which are so ridiculously false as to leave no doubt that some wicked wag, knowing she would write a book, has furnished her materials—a game too often played on tourists in this country. The constant recurrence of the female abolitionists to this topic, and their bitterness in regard to it, cannot fail to suggest to even the most charitable mind, that

“Such rage without betrays the fires within.”

Nor are their immaculate coadjutors of the other sex, though perhaps less specific in their charges, less violent in their denunciations. But recently, in your island, a clergyman has, at a public meeting, stigmatized the whole slaveholding region as a “brothel.” Do these people thus cast stones, being “without sin”? Or do they only

“Compound for sins they are inclined to,
By damning those they have no mind to!”

Alas that David and Solomon should be allowed to repose in peace; that Leo should be almost canonized, and Luther more than sainted; that, in our day, courtesans should be formally licensed in Paris, and tenements in London rented for years to women of the town, for the benefit of the church, with the knowledge of the bishop; and the poor slave states of America alone pounced upon, and offered up as a holocaust on the Altar of Immaculateness, to atone for the abuse of natural instinct by all mankind; and if

not actually consumed, at least exposed, anathematized and held up to scorn, by these who

“write
Or with a rival's or an enemy's spite.”

But I do not intend to admit that this charge is just or true. Without meaning to profess uncommon modesty, I will say that I wish the topic could be avoided. I am of opinion, and I doubt not every right-minded man will concur, that the public exposure and discussion of this vice, even to rebuke, invariably does more harm than good; and that if it cannot be checked by instilling pure and virtuous sentiments, it is far worse than useless to attempt to do it by exhibiting its deformities. I may not, however, pass it over; nor ought I to feel any delicacy in examining a question to which the slaveholder is invited and challenged by clergymen and virgins. So far from allowing, then, that licentiousness pervades this region, I broadly assert, and I refer to the records of our courts, to the public press, and to the knowledge of all who have ever lived here, that, among our white population, there are fewer cases of divorce, separation, crim. con., seduction, rape, and bastardy, than among any other five millions of people on the civilized earth. And this fact, I believe, will be conceded by the abolitionists of this country themselves. I am almost willing to refer it to them, and submit to their decision on it. I would not hesitate to do so, if I thought them capable of an impartial judgment on any matter where slavery is in question. But it is said that the licentiousness consists in the constant intercourse between white males and colored females. One of your heavy charges against us has been that we regard and treat these people as brutes; you now charge us with habitually taking them to our bosoms. I will not comment on the inconsistency of these accusations. I will not deny that some intercourse of the sort does take place. Its character and extent, however, are grossly and atrociously exaggerated. No authority, divine or human, has yet been found sufficient to arrest all such irregularities among men. But it is a known fact, that they are perpetrated here, for the most part, in the cities. Very few mulattoes are reared on our plantations. In the cities, a large proportion of the inhabitants do not own slaves. A still larger proportion are natives of the north or foreigners. They should share, and justly too, an equal part, in this sin, with the slaveholders. Facts cannot be ascertained, or, I doubt not, it would appear that they are the chief offenders. If the truth be otherwise, then persons from abroad have stronger prejudices against the African race than we have. Be this as

it may, it is well known that this intercourse is regarded, in our society, as highly disreputable. If carried on habitually, it seriously affects a man's standing, so far as it is known; and he who takes a colored mistress—with rare and extraordinary exceptions—loses caste at once. You will say that *one* exception should damn our whole country. How much less criminal is it to take a white mistress! In your eyes it should be at least an equal offense. Yet look around you at home, from the cottage to the throne, and count how many mistresses are kept, in unblushing notoriety, without any loss of caste. Such cases are nearly unknown here, and down even to the lowest walks of life, it is almost invariably fatal to a man's position and prospects, to keep a mistress openly, whether white or black. What Miss Martineau relates of a young man's purchasing a colored concubine from a lady, and avowing his designs, is too absurd even for contradiction. No person would dare to allude to such a subject, in such a manner, to any decent female in this country. If he did, he would be *lynched*—doubtless with your approbation.

After all, however, the number of the mixed breed, in proportion to that of the black, is infinitely small, and, out of the towns, next to nothing. And when it is considered that the African race has been among us for two hundred years, and that those of the mixed breed continually intermarry, often rearing large families, it is a decided proof of our continence, that so few comparatively are to be found. Our misfortunes are two-fold. From the prolific propagation of these mongrels among themselves, we are liable to be charged by tourists with delinquencies where none have been committed, while, where one has been, it cannot be concealed. Color marks indelibly the offense, and reveals it to every eye. Conceive that, even in your virtuous and polished country, if every bastard through all the circles of your social system was thus branded by nature and known to all, what shocking developments might there not be! How little indignation might your saints have to spare for the licentiousness of the slave region. But I have done with this disgusting topic. And I think I may justly conclude, after all the scandalous charges which tea-table gossip and long-gowned hypocrisy have brought against the slaveholders, that a people whose men are proverbially brave, intellectual and hospitable, and whose women are unaffectedly chaste, devoted to domestic life, and happy in it, can neither be degraded nor demoralized, whatever their institutions may be. My decided opinion is, that our system of slavery contributes largely to the

development and culture of these high and noble qualities.

In an economical point of view—which I will not omit—slavery presents some difficulties. As a general rule, I agree that it must be admitted, that free labor is cheaper than slave labor. It is a fallacy to suppose that ours is *unpaid labor*. The slave himself must be paid for, and thus his labor is all purchased at once, and for no trifling sum. His price was, in the first place, paid mostly to your countrymen, and assisted in building up some of those colossal English fortunes, since illustrated by patents of nobility and splendid piles of architecture, stained and cemented, if you like the expression, with the blood of kidnapped innocents; but loaded with no heavier curses than abolition, and its begotten fanaticisms, have brought upon your land—some of them fulfilled, some yet to be. But besides the first cost of the slave, he must be fed and clothed—well fed and well clothed, if not for humanity's sake, that he may do good work, retain health and life, and rear a family to supply his place. When old or sick he is a clear expense, and so is the helpless portion of his family. No poor-law provides for him when unable to work, or brings up his children for our service when we need them. These are all heavy charges on slave labor. Hence, in all countries where the denseness of the population has reduced it to a matter of perfect certainty that labor can be obtained whenever wanted, and the laborer be forced, by sheer necessity, to hire for the smallest pittance that will keep soul and body together, and rage upon his back, while in actual employment—dependent, at all other times, on alms or poor-rates—in all such countries it is found cheaper to pay this pittance than to clothe, feed, nurse, support through childhood and pension in old age, a race of slaves. Indeed, the advantage is so great as speedily to compensate for the loss of the value of the slave. And I have no hesitation in saying, that if I could cultivate my lands on these terms, I would, without a word, resign my slaves, provided they could be properly disposed of. But the question is, whether free or slave labor is cheapest to us in this country, at this time, situated as we are. And it is decided at once by the fact, that we cannot avail ourselves of any other than slave labor. We neither have, nor can we procure, other labor to any extent, or on anything like the terms mentioned. We must, therefore, content ourselves with our dear labor, under the consoling reflection, that what is lost to us is gained to humanity; and that, inasmuch as our slave costs us more than your freeman costs you, by so much is he better off. You will promptly say, emancipate your slaves,

and then you will have free labor on suitable terms. That might be, if there were five hundred where there is now one, and the continent, from the Atlantic to the Pacific, was as densely populated as your island. But until that comes to pass, no labor can be procured in America on the terms you have it.

While I thus freely admit that, to the individual proprietor, slave labor is dearer than free, I do not mean to admit it as equally clear, that it is dearer to the community and to the state. Though it is certain that the slave is a far greater consumer than your laborer, the year round, yet your pauper system is costly and wasteful. Supported by your community at large, it is not administered by your hired agents with that interested care and economy—not to speak of humanity—which mark the management of ours, by each proprietor of his own non-effectives; and is both more expensive to those who pay, and less beneficial to those who receive its bounties. Besides this, slavery is rapidly filling up our country with a hardy and healthy race, peculiarly adapted to our climate and productions, and conferring signal political and social advantages on us as a people, to which I have already referred.

I have yet to reply to the main ground on which you and your coadjutors rely for the overthrow of our system of slavery. Failing in all your attempts to prove that it is sinful in its nature, immoral in its effects, a political evil, and profitless to those who maintain it, you appeal to the sympathies of mankind, and attempt to arouse the world against us, by the most shocking charges of tyranny and cruelty. You begin by a vehement denunciation of "the irresponsible power of one man over his fellow-men." The question of the responsibility of power is a vast one. It is the great political question of modern times. Whole nations divide off upon it, and establish different fundamental systems of government. That "responsibility" which, to one set of millions, seems amply sufficient to check the government, to the support of which they devote their lives and fortunes, appears to another set of millions a mere mockery of restraint. And accordingly as the opinions of these millions differ, they honor each other with the epithets of "serfs" or "anarchists." It is ridiculous to introduce such an idea as this into the discussion of a mere domestic institution. But since you have introduced it, I deny that the power of the slaveholder in America is "irresponsible." He is responsible to God. He is responsible to a world—a responsibility which abolitionists do not intend to allow him to evade, and in acknowledgment of which I write you this letter. He is responsible to the

community in which he lives, and to the laws under which he enjoys his civil rights. These laws do not permit him to kill, to maim, or punish beyond certain limits, or to overtask, or to refuse to feed and clothe, his slave. In short, they forbid him to be tyrannical or cruel. If any of these laws have grown obsolete, it is because they are so seldom violated that they are forgotten. You have disinterred one of them from a compilation by some Judge Stroud of Philadelphia, to stigmatize its inadequate penalties for killing, maiming, &c. Your object appears to be—you can have no other—to produce the impression that it must be often violated on account of its insufficiency. You say as much, and that it marks our estimate of the slave. You forget to state that this law was enacted by *Englishmen*, and only indicates *their* opinion of the reparation due for their offenses. Ours is proved by the fact, though perhaps unknown to Judge Stroud or yourself, that we have essentially altered this law; and the murder of a slave has for many years been punishable with death in this state. And so it is, I believe, in most or all the slave states. You seem well aware, however, that laws have been recently passed in all these states making it penal to teach slaves to read. Do you know what occasioned their passage, and renders their stringent enforcement necessary? I can tell you. It was the abolition agitation. If the slave is not allowed to read his Bible, the sin rests upon the abolitionists; for they stand prepared to furnish him with a key to it, which would make it, not a book of hope and love and peace, but of despair, hatred, and blood; which would convert the reader, not into a Christian, but a demon. To preserve him from such a horrid destiny, it is a sacred duty which we owe to our slaves, not less than to ourselves, to interpose the most decisive means. If the Catholics deem it wrong to trust the Bible to the hands of ignorance, shall we be excommunicated because we will not give it, and with it the corrupt and fatal commentaries of the abolitionists, to our slaves? Allow our slaves to read your pamphlets, stimulating them to cut our throats! Can you believe us to be such unspeakable fools?

I do not know that I can subscribe in full to the sentiment so often quoted by the abolitionists, and by Mr. Dickinson in his letter to me: "*Homo sum, humani nil a me alienum puto*," as translated and practically illustrated by them. Such a doctrine would give wide authority to every one for the most dangerous intermeddling with the affairs of others. It will do in poetry—perhaps in some sorts of philosophy—but the attempt to make it a household maxim, and introduce it into the daily walks of life, has caused many an "homo" a broken crown, and probably will

continue to do it. Still, though a slaveholder, I freely acknowledge my obligations as a man; and that I am bound to treat humanely the fellow-creatures whom God has intrusted to my charge. I feel therefore somewhat sensitive under the accusation of cruelty, and disposed to defend myself and fellow slaveholders against it. It is certainly the interest of all, and I am convinced that it is also the desire of every one of us, to treat our slaves with proper kindness. It is necessary to our deriving the greatest amount of profit from them. Of this we are all satisfied. And you snatch from us the only consolation we Americans could derive from the opprobrious imputation of being wholly devoted to making money, which your disinterested and gold-despising countrymen delight to cast upon us, when you nevertheless declare that we are ready to sacrifice it for the pleasure of being inhuman. You remember that Mr. Pitt could never get over the idea that self-interest would insure kind treatment to slaves, until you told him your woful stories of the Middle Passage. Mr. Pitt was right in the first instance, and erred under your tuition, in not perceiving the difference between a temporary and a permanent ownership of them. Slaveholders are no more perfect than other men. They have passions. Some of them, as you may suppose, do not at all times restrain them. Neither do husbands, parents and friends. And in each of these relations as serious sufferings as frequently arise from uncontrolled passions as ever do in that of master and slave, and with as little chance of indemnity. Yet you would not on that account break them up. I have no hesitation in saying that our slaveholders are as kind masters as men usually are kind husbands, parents and friends—as a general rule, kinder. A bad master—he who overworks his slaves, provides ill for them, or treats them with undue severity—loses the esteem and respect of his fellow-citizens to as great an extent as he would for the violation of any of his social and most of his moral obligations. What the most perfect plan of management would be is a problem hard to solve. From the commencement of slavery in this country, this subject has occupied the minds of all slaveholders, as much as the improvement of the general condition of mankind has those of the most ardent philanthropists; and the greatest progressive amelioration of the system has been effected. You yourself acknowledge that in the early part of your career you were exceedingly anxious for the *immediate* abolition of the slave trade, lest those engaged in it should so mitigate its evils as to destroy the force of your arguments and facts. The improvement you then *dreaded* has gone on steadily here, and would doubtless have taken place in the slave trade but for the measures adopted to suppress it.

Of late years we have been not only annoyed, but greatly embarrassed in this matter by the abolitionists. We have been compelled to curtail some privileges; we have been debarred from granting new ones. In the face of discussions which aim at loosening all ties between master and slave, we have in some measure to abandon our efforts to attach them to us, and control them through their affections and pride. We have to rely more and more on the power of fear. We must in all our intercourse with them assert and maintain strict mastery, and impress it on them that they are slaves. This is painful to us, and certainly no present advantage to them. But it is the direct consequence of the abolition agitation. We are determined to continue masters, and to do so we have to draw the rein tighter and tighter day by day to be assured that we hold them in complete check. How far this process will go on, depends wholly and solely on the abolitionists. When they desist we can relax. We may not before. I do not mean by all this to say that we are in a state of actual alarm and fear of our slaves; but under existing circumstances we should be ineffably stupid not to increase our vigilance and strengthen our hands. You see some of the fruits of your labors. I speak freely and candidly—not as a colonist who, though a slaveholder, has a master; but as a free white man holding, under God, and resolved to hold, my fate in my own hands; but I assure you that my sentiments and feelings and determinations are those of every slaveholder in this country.

The research and ingenuity of the abolitionists, aided by the invention of runaway slaves—in which faculty, so far as improvising falsehood goes, the African race is without a rival—have succeeded in shocking the world with a small number of pretended instances of our barbarity. The only wonder is that, considering the extent of our country, the variety of our population, its fluctuating character, and the publicity of all our transactions, the number of cases collected is so small. It speaks well for us. Yet of these many are false, all highly colored, some occurring half a century, most of them many years ago; and no doubt a large proportion of them perpetrated by foreigners. With a few rare exceptions, the emigrant Scotch and English are the worst masters among us, and next to them our northern fellow-citizens. Slaveholders born and bred here are always more humane to slaves, and those who have grown up to a large inheritance of them, the most so of any, showing clearly that the effect of the system is to foster kindly feelings. I do not mean so much to impute inhumanity to foreigners, as to show that they come here with false notions of the treatment usual and necessary for slaves, and that newly acquired power here, as every where else, is apt to be abused.

I cannot enter into a detailed examination of the cases stated by the abolitionists. It would be disgusting and of little avail. I know nothing of them. I have seen nothing like them, though born and bred here, and have rarely heard of any thing at all to be compared with them. Permit me to say that I think most of *your* facts must have been drawn from the West Indies, where undoubtedly slaves were treated much more harshly than with us. This was owing to a variety of causes, which might, if necessary, be stated. One was, that they had at first to deal more extensively with barbarians fresh from the wilds of Africa; another, and a leading one, the absenteeism of proprietors. Agents are always more unfeeling than owners, whether placed over West Indian or American slaves, or Irish tenantry. We feel this evil greatly even here. You describe the use of *thumb-screws* as one mode of punishment among us. I doubt if a thumb-screw can be found in America. I never saw or heard of one in this country. Stocks are rarely used by private individuals, and confinement still more seldom, though both are common punishments for whites, all the world over. I think they should be more frequently resorted to with slaves, as substitutes for flogging, which I consider the most injurious and least efficacious mode of punishing them for serious offenses. It is not degrading, and unless excessive, occasions little pain. You may be a little astonished, after all the flourishes that have been made about "cart whips," etc., when I say flogging is not the most degrading punishment in the world. It may be so to a white man in most countries, but how is it to the white boy? That necessary coadjutor of the schoolmaster, the "birch," is never thought to have rendered infamous the unfortunate victim of pedagogic ire; nor did Solomon in his wisdom dream that he was counselling parents to debase their offspring, when he exhorted them not to spoil the child by sparing the rod. Pardon me for recurring to the now exploded ethics of the Bible. Custom, which, you will perhaps agree, makes most things in this world good or evil, has removed all infamy from the punishment of the lash to the slave. Your blood boils at the recital of stripes inflicted on a man; and you think you should be frenzied to see your own child flogged. You see how completely this is ideal, arising from the fashions of society. You doubtless submitted to the rod yourself, in other years, when the smart was perhaps as severe as it would be now; and you have never been guilty of the folly of revenging yourself on the preceptor who, in the plenitude of his "irresponsible power," thought proper to chastise your son. So it is with the negro and the negro father.

As to chains and irons, they are rarely used; never, I believe, except in cases of running

away. You will admit, that if we pretend to own slaves, they must not be permitted to abscond whenever they see fit; and that if nothing else will prevent it, these means must be resorted to. See the inhumanity necessarily arising from slavery, you will exclaim. Are such restraints imposed on no other class of people giving no more offense? Look to your army and navy. If your seamen, impressed from their peaceful occupations, and your soldiers, recruited at the gin shops—both of them as much kidnapped as the most unsuspecting victim of the slave trade, and doomed to a far more wretched fate—if these men manifest a propensity to desert, the heaviest manacles are the mildest punishment: it is most commonly death after summary trial. But armies and navies, you say, are indispensable, and must be kept up at every sacrifice. I answer that they are no more indispensable than slavery is to us—and to you; for you have enough of it in your country, though the form and name differ from ours.

Depend upon it that many things, and in regard to our slaves, most things, which appear revolting at a distance, and to slight reflection, would, on a nearer view and impartial comparison with the customs and conduct of the rest of mankind, strike you in a very different light. Remember that on our estates we dispense with the whole machinery of public police and public courts of justice. Thus we try, decide and execute the sentences in thousands of cases, which in other countries would go into the courts. Hence most of the acts of our alleged cruelty which have any foundation in truth. Whether our patriarchal mode of administering justice is less humane than the assizes, can only be determined by careful inquiry and comparison. But this is never done by the abolitionists. All our punishments are the outrages of "irresponsible power." If a man steals a pig in England, he is transported—torn from wife, children, parents, and sent to the antipodes, infamous, and an outcast for ever, though probably he took from the superabundance of his neighbor to save the lives of his famishing little ones. If one of our well-fed negroes, merely for the sake of fresh meat, steals a pig, he gets perhaps forty stripes. If one of your cottagers breaks into another's house, he is hung for burglary. If a slave does the same here, a few lashes, or it may be a few hours in the stocks, settles the matter. Are our courts or yours the most humane? If slavery were not in question, you would doubtless say ours is mistaken lenity. Perhaps it often is; and slaves too lightly dealt with sometimes grow daring. Occasionally, though rarely, and almost always in consequence of excessive indulgence, an individual rebels. This is the highest crime he can commit. It is treason. It strikes at the root of our whole system.

His life is justly forfeited, though it is never intentionally taken, unless after trial in our public courts. Sometimes, however, in capturing, or in self-defense, he is unfortunately killed. A legal investigation always follows. But terminate as it may, the abolitionists raise a hue and cry, and another "shocking case" is held up to the indignation of the world by tender-hearted male and female philanthropists, who would have thought all right had the master's throat been cut, and would have triumphed in it.

I cannot go into a detailed comparison between the penalties inflicted on a slave in our patriarchal courts and those of the courts of sessions to which freemen are sentenced in all civilized countries; but I know well that if there is any fault in our criminal code, it is that of excessive mildness.

PHYSICAL AND MORAL CONDITION OF SOUTHERN SLAVES COMPARED WITH ENGLISH LABORERS; SCHEMES OF ABOLITION; MORAL SITUATION, FORCE; COMPETITION OF FREE LABOR; WEST INDIA EMANCIPATION. (CONTINUED)—Perhaps a few general facts will best illustrate the treatment this race receives at our hands. It is acknowledged that it increases at least as rapidly as the white. I believe it is an established principle that population thrives in proportion to its comforts. But when it is considered that these people are not recruited by emigration from abroad as the whites are, and that they are usually settled on our richest and least healthy lands, the fact of their equal comparative increase and greater longevity outweighs a thousand abolition falsehoods, in favor of the leniency and providence of our management of them. It is also admitted that there are incomparably fewer cases of insanity and suicide among them than among the whites. The fact is, that among the slaves of the African race, these things are almost wholly unknown. However frequent suicide may have been among those brought from Africa, I can say that, in my time, I cannot remember to have known or heard of a single instance of deliberate self-destruction, and but of one of suicide at all. As to insanity, I have seen but one permanent case of it, and that twenty years ago. It cannot be doubted that among three millions of people there must be some insane and some suicides; but I will venture to say, that more cases of both occur annually among every hundred thousand of the population of Great Britain than among all our slaves. Can it be possible, then, that they exist in that state of abject misery, goaded by constant injuries, outraged in their affections, and worn down with hardships, which the abolitionists depict, and so many ignorant and thoughtless persons religiously believe?

With regard to the separation of husbands and wives, parents and children, nothing can

be more untrue than the inferences drawn from what is so constantly harped on by abolitionists. Some painful instances perhaps may occur. Very few that can be prevented. It is, and it always has been, an object of prime consideration with our slaveholders to keep families together. Negroes are themselves both perverse and comparatively indifferent about this matter. It is a singular trait, that they almost invariably prefer forming connections with slaves belonging to other masters, and at some distance. It is, therefore, impossible to prevent separations sometimes, by the removal of one owner, his death or failure, and dispersion of his property. In all such cases, however, every reasonable effort is made to keep the parties together, if they desire it. And the negroes forming these connections, knowing the chance of their premature dissolution, rarely complain more than we all do of the inevitable strokes of fate. Sometimes it happens that a negro prefers to give up his family, rather than separate from his master. I have known such instances. As to wilfully selling off a husband, or wife, or child, I believe it is rarely, very rarely done, except when some offense has been committed demanding "transportation." At sales of estates, and even at sheriff's sales, they are always, if possible, sold in families. On the whole, notwithstanding the migratory character of our population, I believe there are more families among our slaves who have lived and died together without losing a single member from their circle, except by the process of nature, and in the enjoyment of constant, uninterrupted communion, than have flourished in the same space of time and among the same number of civilized people in modern times. And, to sum up all, if pleasure is correctly to be defined to be the absence of pain, (which, so far as the great body of mankind is concerned, is undoubtedly its true definition,) I believe our slaves are the happiest three millions of human beings on whom the sun shines. Into their Eden is coming Satan in the guise of an abolitionist.

As regards their religious condition, it is well known that a majority of the communicants of the Methodist and Baptist churches of the south are colored. Almost every where they have precisely the same opportunities of attending worship that the whites have, and besides, special occasions for themselves exclusively, which they prefer. In many places not so accessible to clergymen in ordinary, missionaries are sent and mainly supported by their masters, for the particular benefit of the slaves. There are none, I imagine, who may not, if they like, hear the Gospel preached at least once a month, most of them twice a month, and very many every week. In our thinly settled country the whites fare no better. But, in addition to

this, on plantations of any size, the slaves who have joined the church are formed into a class, at the head of which is placed one of their number, acting as deacon or leader, who is also sometimes a licensed preacher. This class assembles for religious exercises weekly, semi-weekly, or oftener, if the members choose. In some parts, also, Sunday-schools for blacks are established, and Bible classes are orally instructed by discreet and pious persons. Now where will you find a laboring population possessed of greater religious advantages than these? Not in London, I am sure, where it is known that your churches, chapels, and religious meeting-houses of all sorts, cannot contain one half of the inhabitants.

I have admitted, without hesitation, what it would be untrue and profitless to deny, that slaveholders are responsible to the world for the humane treatment of the fellow-beings whom God has placed in their hands. I think it would be only fair for you to admit what is equally undeniable, that every man in independent circumstances, all the world over, and every government, is, to the same extent, responsible to the whole human family for the condition of the poor and laboring classes in their own country and around them, wherever they may be placed, to whom God has denied the advantages he has given themselves. If so, it would naturally seem the duty of true humanity and rational philanthropy to devote their time and labor, their thoughts, writings and charity, first, to the objects placed, as it were, under their own immediate charge. And it must be regarded as a clear evasion and sinful neglect of this cardinal duty, to pass from those whose destitute situation they can plainly see, minutely examine, and efficiently relieve, to inquire after the condition of others in no way intrusted to their care, to exaggerate evils of which they cannot be cognizant, to expend all their sympathies and exhaust all their energies on these remote objects of their unnatural, not to say dangerous benevolence; and, finally, to calumniate, denounce, and endeavor to excite the indignation of the world against their unoffending fellow-creatures for not hastening, under their dictation, to redress wrongs which are stoutly and truthfully denied, while they themselves go but little further in alleviating those chargesable on them than openly and unblushingly to acknowledge them. There may be, indeed, a sort of merit in doing so much as to make such an acknowledgment, but it must be very modest if it expects appreciation.

Now I affirm that, in Great Britain, the poor and laboring classes of your own race and color, not only your fellow-beings, but your fellow-citizens, are more miserable and degraded, morally and physically, than our slaves; to be elevated to the actual condition of whom, would be to these, your fellow-citi-

zens, a most glorious act of *emancipation*. And I also affirm, that the poor and laboring classes of our older free states would not be in a much more enviable condition but for our slavery. One of their own senators has declared in the United States Senate, "that the repeal of the tariff would reduce New-England to a howling wilderness." And the American tariff is neither more nor less than a system by which the slave states are plundered for the benefit of those states which do not tolerate slavery.

To prove what I say of Great Britain to be true, I make the following extracts from the reports of commissioners appointed by Parliament, and published by order of the House of Commons. I can make but few, and short ones. But similar quotations might be made to any extent, and I defy you to deny that these specimens exhibit the real condition of your operatives in every branch of your industry. There is, of course, a variety in their sufferings. But the same incredible amount of toil, frightful destitution, and utter want of morals, characterize the lot of every class of them.

COLLIERIES.—"I wish to call the attention of the Board to pits about Brompton. The seams are so thin, that several of them have only two feet headway to all the working. They are worked altogether by boys from eight to twelve years of age, on all fours, with a dog belt and chain. The passages being neither ironed nor wooded, and often an inch or two thick with mud. In Mr. Barnes's pit, these poor boys have to drag the barrows with one hundred weight of coal or slack, sixty times a day, sixty yards, and the empty barrows back, without once straightening their backs, unless they choose to stand under the shaft, and run the risk of having their heads broken by a falling coal."—*Report on Mines, 1842, p. 71.*

"In Shropshire the seams are no more than eighteen or twenty inches."—*Ibid. p. 67.* "At the Booth pit," says Mr. Scriven, "I walked, rode, and crept, eighteen hundred yards to one of the nearest faces."—*Ibid.* "Chokedamp, 'firedamp,' 'wildfire,' sulphur, and 'water,' at all times menace instant death to the laborers in these mines." "Robert North, aged sixteen: Went into the pit at seven years of age, to fill up skips. I drew about twelve months. When I drew by the girdle and chain, my skin was broken, and the blood ran down. I durst not say any thing. If we said any thing, the botty, and the reeve, who works under him, would take a stick and beat us."—*Ibid.* "The usual punishment for theft, is to place the culprit's head between the legs of one of the biggest boys, and each boy in the pit (sometimes there are twenty) inflicts twelve lashes on the back and rump with a cat."—*Ibid.* "Instances occur in which children are taken into these mines to work as early as four years of age, sometimes at five, not unfrequently at six or

seven; while from eight to nine is the ordinary age at which these employments commence."—*Ibid* "The wages paid at these mines is from \$2.50 to \$7.50 per month, for laborers, according to age and ability; and out of this they must support themselves. They work twelve hours a day."—*Ibid*.

IN CALICO PRINTING.—"It is by no means uncommon, in all the districts, for children five or six years old to be kept at work fourteen to sixteen hours consecutively."—*Report on Children*, 1842, p. 59.

I could furnish extracts similar to these in regard to every branch of your manufactures, but I will not multiply them. Everybody knows that your operatives habitually labor from twelve to sixteen hours, men, women and children, and the men occasionally twenty hours per day. In lace making, says the last quoted report, children sometimes commence work at two years of age.

DESTRUCTION.—It is stated by your commissioners, that forty thousand persons in Liverpool, and fifteen thousand in Manchester, live in cellars; while twenty-two thousand in England pass the night in barns, tents, or the open air. "There have been found such occurrences as seven, eight and ten persons in one cottage, I cannot say for one day, but for whole days, without a morsel of food. They have remained on their beds of straw for two successive days, under the impression that in a recumbent posture the pangs of hunger were less felt."—*Lord Brougham's Speech*, 11th July, 1842. A volume of frightful scenes might be quoted to corroborate the inferences to be necessarily drawn from the facts here stated. I will not add more, but pass on to the important inquiry as to

MORALS AND EDUCATION.—"Elizabeth Barrett, aged fourteen: I always work without stockings, shoes or trowsers. I wear nothing but a shift. I have to go up to the headings with the men. They are all naked there. I am got used to that."—*Report on Mines*. "As to illicit sexual intercourse, it seems to prevail universally, and from an early period of life." "The evidence might have been doubled, which attests the early commencement of sexual and promiscuous intercourse among boys and girls." "A lower condition of morals, in the fullest sense of the term, could not, I think, be found. I do not mean by this, that there are many more prominent vices among them, but that moral feelings and sentiments do not exist. They have no morals." "Their appearance, manners and moral nature, (so far as the word *moral* can be applied to them,) are in accordance with their half-civilized condition."—*Report on Children*. "More than half a dozen instances occurred in Manchester, where a man, his wife, and his wife's grown-up sister, habitually occu-

pied the same bed."—*Report on Sanitary Condition*. Robert Cruchilow, aged sixteen: "I don't know any thing of Moses—never heard of France. I don't know what America is. Never heard of Scotland or Ireland. Can't tell how many weeks there are in a year. There are twelve pence in a shilling, and twenty shillings in a pound. There are eight pints in a gallon of ale."—*Report on Mines*. Ann Eggle, aged eighteen: "I walk about and get fresh air on Sundays. I never go to church or chapel. I never heard of Christ at all."—*Ibid*. Others: "The Lord sent Adam and Eve on earth to save sinners." "I don't know who made the world—I never heard about God." "I don't know Jesus Christ—I never saw him—but I have seen Foster who prays about him." *Employer*: "You have expressed surprise at Thomas Mitchel's not hearing of God. I judge there are few colliers hereabout that have."—*Ibid*.

I will quote no more. It is shocking beyond endurance to turn over your records, in which the condition of your laboring classes is but too faithfully depicted. Could our slaves but see it, they would join us in lynching abolitionists, which, by the by, they would not now be loth to do. We never think of imposing on them such labor, either in amount or kind. We never put them to any work under ten, more generally at twelve years of age, and then the very lightest. Destitution is absolutely unknown—never did a slave starve in America; while, in moral sentiments and feelings, in religious information, and even in general intelligence, they are infinitely the superiors of your operatives. When you look around you, how dare you talk to us, before the world, of slavery! For the condition of your wretched laborers, you, and every Briton who is not one of them, are responsible before God and man. If you are really humane, philanthropic and charitable, here are objects for you. Relieve them. Emancipate them. Raise them from the condition of brutes to the level of human beings—of American slaves, at least. Do not, for an instant, suppose that the name of being freemen is the slightest comfort to them, situated as they are, or that the bombastic boast that "whoever touches British soil stands redeemed, regenerated and disenthralled," can meet with anything but the ridicule and contempt of mankind, while that soil swarms, both on and under its surface, with the most abject and degraded wretches that ever bowed beneath the oppressor's yoke.

I have said that slavery is an established and inevitable condition to human society. I do not speak of the name, but the fact. The Marquis of Normanby has lately declared your operatives to be "in effect slaves."

Can it be denied? Probably; for such philanthropists as your abolitionists care nothing for facts. They deal in terms and fictions. It is the word "slavery" which shocks their tender sensibilities; and their imaginations associate it with "hydras and chimeras dire." The thing itself, in its most hideous reality, passes daily under their view unheeded; a familiar face, touching no chord of shame, sympathy or indignation. Yet, so brutalizing is your iron bondage, that the English operative is a by-word through the world. When favoring fortune enables him to escape his prison-house, both in Europe and America he is shunned. With all the skill which fourteen hours of daily labor from the tenderest age has ground into him, his discontent, which habit has made second nature, and his depraved propensities, running riot when freed from his wonted fetters, prevent his employment whenever it is not a matter of necessity. If we derived no other benefit from African slavery in the southern states, than that it deterred your *freemen* from coming hither, I should regard it as an inestimable blessing.

And how unaccountable is that philanthropy, which closes its eyes upon such a state of things as you have at home, and turns its blurred vision to our affairs beyond the Atlantic, meddling with matters which no way concern them—presiding, as you have lately done, at meetings to denounce the "iniquity of our laws," and "the atrocity of our practices," and to sympathize with infamous wretches imprisoned here for violating decrees promulgated both by God and man. Is this doing the work of "your Father which is in heaven," or is it seeking only "that you may have glory of man?" Do you remember the denunciation of our Saviour: "Wo unto you, Scribes and Pharisees; hypocrites! for ye make clean the outside of the cup and platter, but within they are full of extortion and excess."

But after all, supposing that every thing you say of slavery be true, and its abolition a matter of the last necessity, how do you expect to effect emancipation, and what do you calculate will be the result of its accomplishment? As to the means to be used, the abolitionists, I believe, affect to differ—a large proportion of them pretending that their sole purpose is to apply "moral suasion" to the slaveholders themselves. As a matter of curiosity, I should like to know what their idea of this "moral suasion" is. Their discourses (yours is no exception) are all tirades—the exordium, argument and peroration, turning on the epithets, "tyrants," "thieves," "murderers," addressed to us. They revile us as "atrocious monsters," "violators of the laws of nature, God and man;" our homes the abode of every in-

iquity, our land a "brothel." We retort that they are "incendiaries" and "assassins." Delightful argument! sweet, potent "moral suasion!" What slave has it freed—what proselyte can it ever make? But, if your course was wholly different—if you distilled nectar from your lips, and discoursed sweetest music, could you reasonably indulge the hope of accomplishing your object by such means? Nay, supposing that we were all convinced, and thought of slavery precisely as you do, at what era of "moral suasion" do you imagine you could prevail on us to give up a thousand millions of dollars in the value of our slaves, and a thousand millions of dollars more in the depreciation of our lands, in consequence of the want of laborers to cultivate them? Consider: were ever any people, civilized or savage, persuaded by any argument, human or divine, to surrender, voluntarily, two thousand millions of dollars? Would you think of asking five millions of Englishmen to contribute, either at once or gradually, four hundred and fifty millions of pounds sterling to the cause of philanthropy, even if the purpose to be accomplished were not a doubtful goodness? If you are prepared to undertake such a scheme, try it at home. Collect your fund—purchase our slaves, and do with them as you like. Be all the glory yours, fairly and honestly won. But you see the absurdity of such an idea. Away, then, with your pretended "moral suasion." You know it is mere nonsense. The abolitionists have no faith in it themselves. Those who expect to accomplish any thing, count on means altogether different. They aim, first, to alarm us; that failing, to compel us by force to emancipate our slaves, at our own risk and cost. To these purposes they obviously direct all their energies. Our northern liberty men have endeavored to disseminate their destructive doctrines among our slaves, and excite them to insurrection. But we have put an end to that, and stricken terror into them. They dare not show their faces here. Then they declared they would dissolve the Union. Let them do it. The North would repent it far more than the South. We are not alarmed at the idea. We are well content to give up the Union sooner than sacrifice two thousand millions of dollars, and with them all the rights we prize. You may take it for granted, that it is impossible to persuade or alarm us into emancipation, or to making the first step toward it. Nothing, then, is left to try, but sheer force. If the abolitionists are prepared to expend their own treasure and shed their own blood as freely as they ask us to do ours, let them come. We do not court the conflict; but we will not, and we cannot shrink from it. If they are not ready to go so far; if, as I expect, their

philanthropy recoils from it; if they are looking only for cheap glory, let them turn their thoughts elsewhere, and leave us in peace. Be the sin, the dangers and evils of slavery all our own. We compel, we ask, none to share them with us.

I am well aware that a notable scheme has been set on foot to achieve abolition, by making what is by courtesy called "free" labor so much cheaper than slave labor, as to force the abandonment of the latter. Though we are beginning to *manufacture with slaves*, I do not think you will attempt to pinch your operatives closer in Great Britain. You cannot curtail the rage with which they vainly attempt to cover their nakedness, nor reduce the porridge which barely, and not always, keeps those who have employment from perishing of famine. When you can do this, we will consider whether our slaves may not dispense with a pound or two of bacon per week, or a few garments annually. Your aim, however, is to cheapen labor in the tropics. The idea of doing this by exporting your "bold yeomanry" is, I presume, given up. Cromwell tried it when he sold the captured followers of Charles into *West Indian slavery*, where they speedily found graves. Nor have your recent experiments on British and even Dutch constitutions succeeded better. Have you still faith in carrying thither your Coolies from Hindoostan? Doubtless, that once wild robber race, whose highest eulogium was, that they did not murder merely for the love of blood, have been tamed down, and are, perhaps, "keen for immigration;" for since your civilization has reached it, plunder has grown scarce in Guzerat. But what is the result of the experiment thus far? Have the Coolies, ceasing to handle arms, learned to handle spades, and proved hardy and profitable laborers? On the contrary, broken in spirit, and stricken with disease at home, the wretched victims whom you have hitherto kidnapped for a bounty, confined in depots, put under hatches and carried across the ocean, forced into "voluntary immigration," have done little but lie down and die on the *pseudo* soil of freedom. At the end of five years two thirds, in some colonies a larger proportion, are no more! Humane and pious contrivance! To alleviate the fancied sufferings of the accursed posterity of Ham, you sacrifice, by a cruel death, two thirds of the children of the blessed Shem, and demand the applause of Christians, the blessing of Heaven! If this "experiment" is to go on, in God's name try your hand upon the Thugs. That other species of "immigration" to which you are resorting, I will consider presently.

But what do you calculate will be the result of emancipation, by whatever means

accomplished? You will probably point me, by way of answer, to the West Indies—doubtless to Antigua, the great boast of abolition. Admitting that it has succeeded there—which I will do for the sake of the argument—do you know the reason of it? The true and only causes of whatever success has attended it in Antigua are, that the population was before crowded, and all, or nearly all, the arable land in cultivation. The emancipated negroes could not, many of them, get away if they desired; and knew not where to go, in case they did. They had practically no alternative but to remain on the spot; and remaining, they must work on the terms of the proprietors, or perish—the strong arm of the mother country forbidding all hope of seizing the land for themselves. The proprietors, well knowing that they could thus command labor for the merest necessities of life, which was much cheaper than maintaining the non-effective as well as effective slaves in a style which decency and interest, if not humanity, required, willingly accepted half their value, and at once realized far more than the interest on the other half in the diminution of their expenses, and the reduced comforts of the *freemen*. One of your most illustrious judges, who was also a profound and philosophical historian, has said "that villeinage was not abolished, but went into decay in England." This was the process. This has been the process wherever (the name of) villeinage or slavery has been successfully abandoned. Slavery in fact "went into decay" in Antigua. I have admitted that under similar circumstances it might profitably cease here—that is, profitably to the individual proprietors. Give me half the value of my slaves, and compel them to remain and labor on my plantation at ten to eleven cents a day, as they do in Antigua, supporting themselves and families, and you shall have them to-morrow, and if you like dub them "free." Not to stickle, I would surrender them without price. No—I recall my words: my humanity revolts at the idea. I am attached to my slaves, and would not have art or part in reducing them to such a condition. I deny, however, that Antigua, as a community, is or ever will be *as prosperous*, under present circumstances, as she was before abolition, though fully ripe for it. The fact is well known. The reason is that the African, if not a distinct, is an inferior race, and never will effect, as it never has effected, as much in any other condition as in that of slavery.

I know of no *slaveholder* who has visited the West Indies since slavery was abolished, and published *his* views of it. All our facts and opinions come through the friends of the experiment, or at least those not opposed to it. Taking these, even without

allowance, to be true as stated, I do not see where the abolitionists find causes for exultation. The tables of exports, which are the best evidences of the condition of a people, exhibit a woful falling off—excused, it is true, by unprecedented droughts and hurricanes, to which their free labor seems unaccountably more subject than slave labor used to be. I will not go into detail. It is well known that a large proportion of British legislation and expenditure, and that proportion still constantly increasing, is most anxiously devoted to repairing the monstrous error of emancipation. You are actually galvanizing your expiring colonies. The truth, deduced from all the facts, was thus pithily stated by the London Quarterly Review, as long ago as 1840: "None of the benefits anticipated by mistaken good intentions have been realized, while every evil wished for by knaves, and foreseen by the wise, has been painfully verified. The wild rashness of fanaticism has made the emancipation of the slaves equivalent to the loss of one half of the West Indies, and yet put back the chance of negro civilization."—(*Art. Ld. Dudley's Letters.*) Such are the real fruits of your never-to-be-too-much-glorified abolition, and the valuable dividend of your twenty millions of pounds sterling invested therein.

If any further proof was wanted of the utter and well-known, though not yet openly avowed, failure of West India emancipation, it would be furnished by the startling fact, that THE AFRICAN SLAVE TRADE HAS BEEN ACTUALLY REVIVED UNDER THE AUSPICES AND PROTECTION OF THE BRITISH GOVERNMENT. Under the auspicious guise of "immigration" they are replenishing those islands with slaves from the coast of Africa. Your colony of Sierra Leone, founded on that coast to prevent the slave-trade, and peopled, by the by, in the first instance, by negroes stolen from the States during the Revolutionary war, is the depot where captives taken from slavers by your armed vessels are transported. I might say returned, since nearly half the Africans carried across the Atlantic are understood to be embarked in this vicinity. The wretched survivors, who are there set at liberty, are immediately seduced to "immigrate" to the West Indies. The business is systematically carried on by black "delegates," sent expressly from the West Indies, where, on arrival, the "immigrants" are sold into slavery for twenty-one years, under conditions ridiculously trivial and wickedly void, since few or none will ever be able to derive any advantage from them. The whole prime of life thus passed in bondage, it is contemplated, and doubtless it will be carried into effect, to turn them out in their old age to shift for themselves, and to supply their

places with fresh and vigorous "immigrants." Was ever a system of slavery so barbarous devised before! Can you think of comparing it with ours! Even your own religious missionaries at Sierra Leone denounce it "as worse than the slave state in Africa." And your black delegates, fearful of the influence of these missionaries, as well as on account of the inadequate supply of captives, are now preparing to procure the able-bodied and comparatively industrious Kroomen of the interior, by purchasing from their head men the privilege of inveigling them to the West India market! So ends the magnificent farce—perhaps I should say tragedy—of West India abolition! I will not harrow your feelings by asking you to review the labors of your life, and tell me what you and your brother enthusiasts have accomplished for "injured Africa," but while agreeing with Lord Stowell, that "villeinage decayed," and admitting that slavery might do so also, I think I am fully justified by past and passing events in saying, as Mr. Grovernor said of the slave-trade, that its abolition is "impossible."

You are greatly mistaken, however, if you think that the consequences of emancipation here would be similar and no more injurious than those which followed from it in your little sea-girt West India islands, where nearly all were blacks. The system of slavery is not in "decay" with us. It flourishes in full and growing vigor. Our country is boundless in extent. Dotted here and there with villages and fields, it is for the most part covered with immense forests and swamps of almost unknown size. In such a country, with a people so restless as ours, communicating of course some of that spirit to their domestics, can you conceive that any thing short of the power of the master over the slave could confine the African race, notoriously idle and improvident, to labor on our plantations! Break this bond but for a day, and these plantations will be solitudes. The negro loves change, novelty and sensual excitements of all kinds, *when awake*. "Reason and order," of which Mr. Wilberforce said "liberty was the child," do not characterize him. Released from his present obligations, his first impulse would be to go somewhere. And here no natural boundaries would restrain him. At first they would all seek the towns, and rapidly accumulate in squalid groups upon their outskirts. Driven thence by the "armed police" which would immediately spring into existence, they would scatter in all directions. Some bodies of them might wander toward the "free" states, or to the western wilderness, marking their tracks by their depredations and their corpses. Many would roam wild in our "big woods." Many more would seek the recesses of our

swamps for secure covert. Few, very few, of them could be prevailed on to do a stroke of work, none to labor continuously, while a head of cattle, sheep or swine could be found in our ranges, or an ear of corn nodded in our abandoned fields. These exhausted, our folds and poultry yards, barns and store-houses, would become their prey. Finally, our scattered dwellings would be plundered, perhaps fired, and the inmates murdered. How long do you suppose that we could bear these things? How long would it be before we should sleep with rifles at our bedside, and never move without one in our hands? This work once begun, let the story of our British ancestors and the aborigines of this country tell the sequel. Far more rapid, however, would be the catastrophe. "Ere many moons went by," the African race would be exterminated, or reduced again to slavery, their ranks recruited, after your example, by fresh "immigrants" from their fatherland.

Is timely preparation and gradual emancipation suggested to avert these horrible consequences? I thought your experience in the West Indies had at least done so much as to explode that idea. If it failed there, much more would it fail here, where the two races, approximating to equality in numbers, are daily and hourly in the closest contact. Give room but for a single spark of real jealousy to be kindled between them, and the explosion would be instantaneous and universal. It is the most fatal of all fallacies to suppose that these two races can exist together, after any length of time or any process of preparation, on terms at all approaching to equality. Of this, both of them are finally and fixedly convinced. They differ essentially in all the leading traits which characterize the varieties of the human species, and color draws an indelible and insuperable line of separation between them. Every scheme founded upon the idea that they can remain together on the same soil, beyond the briefest period, in any other relation than precisely that which now subsists between them, is not only preposterous, but fraught with deepest danger. If there was no alternative but to try the "experiment" here, reason and humanity dictate that the sufferings of "gradualism" should be saved, and the catastrophe of "immediate abolition" enacted as rapidly as possible. Are you impatient for the performance to commence? Do you long to gloat over the scenes I have suggested, but could not hold the pen to portray? In your long life many such have passed under your review. You know that *they* are not "impossible." Can they be to your taste? Do you believe that in laboring to bring them about, the abolitionists are doing the will of God? No! God is not there. It is the

work of Satan. The arch-fiend, under specious guises, has found his way into their souls, and with false appeals to philanthropy, and foul insinuations to ambition, instigates them to rush headlong to the accomplishment of his diabolical designs.

We live in a wonderful age. The events of the last three quarters of a century appear to have revolutionized the human mind. Enterprise and ambition are only limited in their purposes by the horizon of the imagination. It is the transcendental era. In philosophy, religion, government, science, arts, commerce, nothing that has been is to be allowed to be. Conservatism in any form is scoffed at. The slightest taint of it is fatal. Where will all this end? If you can tolerate one ancient maxim, let it be that the best criterion of the future is the past. That, if any thing, will give a clue. And looking back only through your time, what was the earliest feat of this same transcendentalism? The rays of the new moral Drummond Light were first concentrated to a focus at Paris, to illuminate the universe. In a twinkling it consumed the political, religious, and social systems of France. It could not be extinguished there until literally drowned in blood. And then from its ashes rose that supernatural man, who for twenty years kept affrighted Europe in convulsions. Since that time its scattered beams, refracted by broader surfaces, have nevertheless continued to scathe wherever they have fallen. What political structure, what religious creed, but has felt the galvanic shock, and even now trembles to its foundations? Mankind, still horror-stricken by the catastrophe of France, have shrunk from rash experiments upon social systems. But they have been practising in the East, around the Mediterranean, and through the West India islands. And growing confident, a portion of them seem desperately bent on kindling the all-devouring flame in the bosom of our land. Let it once again blaze up to heaven, and another cycle of blood and devastation will dawn upon the world. For our own sake, and for the sake of those infatuated men who are madly driving on the conflagration, for the sake of human nature, we are called on to strain every nerve to arrest it. And be assured our efforts will be bounded only with our being. Nor do I doubt that five millions of people, brave, intelligent, united, and prepared to hazard every thing, will, in such a cause, with the blessing of God, sustain themselves. At all events, come what may, it is ours to meet it.

We are well aware of the light estimation in which the abolitionists, and those who are taught by them, profess to hold us. We have seen the attempt of a portion of the Free Church of Scotland to reject our alms, on the ground that we are "slave drivers," after

sending missionaries to solicit them. And we have seen Mr. O'Connell, the "irresponsible master" of millions of ragged serfs, from whom, poverty-stricken as they are, he contrives to wring a splendid privy purse, throw back with contumely the "tribute" of his own countrymen from this land of "miscreants." These people may exhaust their slang and make blackguards of themselves, but they cannot defile us. And as for the suggestion to exclude slaveholders from your London clubs, we scout it. Many of us, indeed, do go to London, and we have seen your breed of gawky Lords, both there and here, but it never entered into our conceptions to look on them as better than ourselves. Nor can we be annoyed by the ridiculous airs of such upstarts as your O'Connells, Ritchies, Macaulays, and the like. The American slaveholders, collectively or individually, ask no favor of any man or race who tread the earth. In none of the attributes of men, mental or physical, do they acknowledge or fear superiority elsewhere. They stand in the broadest light of the knowledge, civilization and improvement of the age, as much favored of Heaven as any of the sons of Adam. Extracting nothing undue, they yield nothing but justice and courtesy, even to royal blood. They cannot be flattered, duped, nor bullied out of their rights or their propriety. They smile with contempt at scurrility and vamping beyond the seas, and they turn their backs upon it where it is "irresponsible;" but insolence that ventures to look them in the face, will never fail to be chastised.

I think I may trust you will not regard this letter as intrusive. I should never have entertained an idea of writing it, had you not opened the correspondence. If you think any thing in it harsh, review your own—which I regret that I lost soon after it was received—and you will probably find that you have taken your revenge beforehand. If you have not, transfer an equitable share of what you deem severe to the account of the abolitionists at large. They have accumulated against the slaveholders a balance of invective, which, with all our efforts, we shall not be able to liquidate much short of the era in which your national debt will be paid. At all events, I have no desire to offend you personally, and, with the best wishes for your continued health, I have the honor to be,

THE ARGUMENT FROM RELIGION; PROGRESS OF FANATICISM; DETERMINATION OF THE SOUTH, &c. (CONCLUDED).—In my letter to you of the 28th January—which I trust you have received ere this—I mentioned that I had lost your circular letter soon after it had come to hand. It was, I am glad to say, only mislaid, and has within a few days been recovered. A second perusal of it induces me to resume my pen. Unwilling to trust my recollections

from a single reading, I did not in my last communication attempt to follow the course of your argument, and meet directly the points made and the terms used. I thought it better to take a general view of the subject, which could not fail to traverse your most material charges. I am well aware, however, that, for fear of being tedious, I omitted many interesting topics altogether, and abstained from a complete discussion of some of those introduced. I do not propose now to *exhaust* the subject, which it would require volumes to do; but without waiting to learn—which I may never do—your opinion of what I have already said, I sit down to supply some of the deficiencies of my letter of January, and, with your circular before me, to reply to such parts of it as have not been fully answered.

It is, I perceive, addressed among others to "such as have never visited the southern states" of this confederacy, and professes to enlighten their ignorance of the actual "condition of the poor slave in their own country." I cannot help thinking you would have displayed prudence in confining the circulation of your letter altogether to such persons. You might then have indulged with impunity in giving, as you have done, a picture of slavery drawn from your own excited imagination, or from those impure fountains, the Martineaus, Marryatts, Trollopes and Dickenses, who have profited by catering, at our expense, to the jealous sensibilities and debauched tastes of your countrymen. Admitting that you are familiar with the history of slavery and the past discussions of it, as I did, I now think rather broadly, in my former letter, what *can you know of the true condition of the "poor slave" here?* I am not aware that you have ever visited this country, or even the West India. Can you suppose that because you have devoted your life to the investigation of the subject—commencing it under the influence of an enthusiasm so melancholy at first and so volcanic afterward as to be nothing short of hallucination; pursuing it as men of *one idea* do every thing, with the single purpose of establishing your own view of it; gathering your information from discharged seamen, disappointed speculators, factious politicians, visionary reformers and scurrilous tourists; opening your ears to every species of complaint, exaggeration and falsehood that interested ingenuity could invent, and never for a moment questioning the truth of any thing that could make for your cause—can you suppose that all this has qualified you, living the while in England, to form or approximate toward the formation of a correct opinion of the condition of slaves among us? I know the power of self-delusion. I have not the least doubt that you think yourself the very best

informed man alive on this subject, and that many think so likewise. So far as facts go, even after deducting from your list a great deal that is not fact, I will not deny that probably your collection is the most extensive in existence. But as to the *truth* in regard to slavery, there is not an adult in this region but knows more of it than you do. *Truth* and *fact* are, you are aware, by no means synonymous terms. Ninety-nine facts may constitute a falsehood: the hundredth, added or alone, gives the truth. With all your knowledge of facts, I undertake to say that you are entirely and grossly ignorant of the real condition of our slaves. And from all that I can see, you are equally ignorant of the essential principles of human association revealed in history, both sacred and profane, on which slavery rests, and which will perpetuate it for ever in some form or other. However you may declaim against it; however powerfully you may array atrocious incidents; whatever appeals you may make to the heated imaginations and tender sensibilities of mankind—believe me, your total blindness to the *whole truth*, which alone constitutes *the truth*, incapacitates you from ever making an impression on the sober reason and sound common sense of the world. You may seduce thousands—you can convince no one. Whenever and wherever you or the advocates of your cause can arouse the passions of the weak-minded and the ignorant, and, bringing to bear with them the interests of the vicious and unprincipled, overwhelm common sense and reason—as God sometimes permits to be done—you may triumph. Such a triumph we have witnessed in Great Britain. But I trust it is far distant here: nor can it from its nature be extensive or enduring. Other classes of reformers, animated by the same spirit as the abolitionists, attack the institution of marriage, and even the established relations of parent and child. And they collect instances of barbarous cruelty and shocking degradation which rival, if they do not throw into the shade, your slavery statistics. But the rights of marriage and parental authority rest upon truths as obvious as they are unchangeable—coming home to every human being, self-impressed for ever on the individual mind, and cannot be shaken until the whole man is corrupted, nor subverted until civilized society becomes a putrid mass. Domestic slavery is not so universally understood, nor can it make such a direct appeal to individuals or society beyond its pale. Here, prejudice and passion have room to sport at the expense of others. They may be excited and urged to dangerous action, remote from the victims they mark out. They may, as they have done, effect great mischief, but they cannot be made to maintain, in the long

run, dominion over reason and common sense, nor ultimately put down what God has ordained.

You deny, however, that slavery is sanctioned by God, and your chief argument is, that when he gave to Adam dominion over the fruits of the earth and the animal creation, he stopped there. "He never gave him any further right over his fellow-men." You restrict the descendants of Adam to a very short list of rights and powers, duties and responsibilities, if you limit them solely to those conferred and enjoined in the first chapter of Genesis. It is very obvious that in this narrative of the creation, Moses did not have it in view to record any part of the Law intended for the government of man in his social or political state. Eve was not yet created; the expulsion had not yet taken place; Cain was unborn; and no allusion whatever is made to the manifold decrees of God to which these events gave rise. The only serious answer this argument deserves is to say, what is so manifestly true, that God's not expressly giving to Adam "any right over his fellow-men" by no means excluded him from conferring that right on his descendants; which he in fact did. We know that Abraham, the chosen one of God, exercised it and held property in his fellow-man, even anterior to the period when property in land was acknowledged. We might infer that God had authorized it. But we are not reduced to inference or conjecture. At the hazard of fatiguing you by repetition, I will again refer you to the ordinances of the Scriptures. Innumerable instances might be quoted where God has given and commanded men to assume dominion over their fellow-men; but one will suffice. In the twenty-fifth chapter of Leviticus you will find *Domestic Slavery—precisely such as is maintained at this day in these states—ordained and established by God, in language which I defy you to pervert so as to leave a doubt on any honest mind that this institution was founded by him and decreed to be perpetual.* I quote the words:

Leviticus xxv. 44-46: "Both thy bondmen and thy bond-maids which thou shalt have, shall be of the heathen (Africans) that are round about you: of them ye shall buy bondmen and bondmaids."

"Moreover, of the children of the strangers that do sojourn among you, of them shall ye buy, and of their families that are with you which they begat in your land, (descendants of Africans!) and they shall be your possession."

"And ye shall take them as an inheritance for your children after you, to inherit them for a possession. THEY SHALL BE YOUR BOND-MEN FOR EVER."

What human legislation could make a

decree more full and explicit than this! What court of law or chancery could defeat a title to a slave couched in terms so clear and complete as these! And this is the *Law of God*, whom you pretend to worship, while you denounce and traduce us for respecting it.

It seems scarcely credible, but the fact is so, that you deny this law so plainly written, and in the face of it have the hardihood to declare that, "though slavery is not *specifically*, yet it is *virtually forbidden* in the Scriptures, because all the crimes which necessarily arise out of slavery, and which can arise from no other source, are reprobated there and threatened with divine vengeance." Such an unworthy subterfuge is scarcely entitled to consideration. But its gross absurdity may be exposed in few words. I do not know what crimes you particularly allude to as arising from slavery. But you will, perhaps, admit—not because they are denounced in the catalogue, which the abolitionists respect only so far as they choose, but because it is the *immediate interest* of most men to admit—that disobedience to parents, adultery, and stealing, are crimes. Yet these crimes "necessarily arise from" the relations of parent and child, marriage, and the possession of private property; at least they "can arise from no other sources." Then, according to your argument, it is "virtually forbidden" to marry, to beget children, and to hold private property! Nay, it is forbidden to live, since murder can only be perpetrated on living subjects. You add that "in the same way the gladiatorial shows of old, and other barbarous customs, were not specifically forbidden in the New Testament, and yet Christianity was the sole means of their suppression." This is very true. But these shows and barbarous customs, thus suppressed, were not *authorized by God*. They were not ordained and commanded by God for the benefit of his chosen people and mankind, as the purchase and holding of bondmen and bondmaids were. Had they been, they would never have been "suppressed by Christianity," any more than slavery can be by your party. Although Christ came "not to destroy but fulfil the Law," he nevertheless did formally abrogate some of the ordinances promulgated by Moses, and all such as were at war with his mission of "peace and goodwill on earth." He "specifically" annuls, for instance, one "barbarous custom," sanctioned by those ordinances, where he says: "Ye have heard that it hath been said, an eye for an eye and a tooth for a tooth; but I say unto you that ye resist not evil, but whosoever shall smite thee on the right cheek, turn to him the other also." Now, in the time of Christ, it was usual for mas-

ters to put their slaves to death on the slightest provocation. They even killed and out them up to feed their fishes. He was undoubtedly aware of these things, as well as of the law and commandment I have quoted. He could only have been restrained from denouncing them as he did the "*lex talionis*," because he knew that in despite of these barbarities the institution of slavery was at the bottom a sound and wholesome as well as lawful one. Certain it is, that in his wisdom and purity he did not see proper to interfere with it. In your wisdom, however, you make the sacrilegious attempt to overthrow it.

You quote the denunciation of Tyre and Sidon, and say that "the chief reason given by the prophet Joel for their destruction was, that they were notorious beyond all others for carrying on the slave trade." I am afraid you think we have no Bibles in the slave states, or that we are unable to read them. I cannot otherwise account for your making this reference, unless, indeed, your own reading is confined to an expurgated edition, prepared for the use of abolitionists, in which every thing relating to slavery that militates against their view of it is left out. The prophet Joel denounces the Tyrians and Sidonians because "The children also of Judah and the children of Jerusalem have ye sold unto the Grecians." And what is the Divine vengeance for this "notorious slave-trading!" Hear it: "And I will sell your sons and daughters into the hands of the children of Judah, and they shall sell them to the Sabeans, to a people far off: for the Lord hath spoken it." Do you call this a condemnation of slave-trading! The prophet makes God himself a participant in the crime, if that be one. "The Lord hath spoken it," he says, that the Tyrians and Sidonians shall be *sold into slavery* to strangers. Their real offense was in enslaving the chosen people; and their sentence was a repetition of the old command, to make slaves of the "heathen round about."

I have dwelt upon your scriptural argument because you profess to believe the Bible; because a large porportion of the abolitionists profess to do the same, and to act under its sanction; because your circular is addressed in part to "professing Christians;" and because it is from that class, mainly, that you expect to seduce converts to your anti-Christian, I may say, infidel doctrine. It would be wholly unnecessary to answer you to any one who reads the Scriptures for himself, and construes them according to any other formula than that which the abolitionists are wickedly endeavoring to impose upon the world. The scriptural sanction of slavery is, in fact, so palpable and so strong, that both wings of

your party are beginning to acknowledge it. The more sensible and moderate admit, as the organ of the Free Church of Scotland, the North British Review, has lately done, that they "*are precluded by the statements and conduct of the apostles from regarding mere slaveholding as essentially sinful*;" while the desperate and reckless, who are bent on keeping up the agitation at every hazard, declare, as has been done in the Anti-Slavery Record, "If our inquiry turns out in favor of slavery, IT IS THE BIBLE THAT MUST FALL, AND NOT THE RIGHTS OF HUMAN NATURE." You cannot, I am satisfied, much longer maintain before the world the Christian platform, from which to wage war upon our institutions. Driven from it, you must abandon the contest; or repudiating REVELATION, rush into the horrors of NATURAL RELIGION.

You next complain, that our slaves are kept in bondage by the "law of force." In what country or condition of mankind do you see human affairs regulated merely by the law of love! Unless I am greatly mistaken, you will, if you look over the world, find nearly all certain and permanent rights, civil, social, and, I may even add, religious, resting on, and ultimately secured by, the "law of force." The power of majorities—of aristocracies—of kings—nay, of priests, for the most part, and of property, resolves itself, at last, into "force," and could not otherwise be long maintained. Thus, in every turn of your argument against our system of slavery, you advance, whether conscious of it or not, radical and revolutionary doctrines calculated to change the whole face of the world, to overthrow all government, disorganize society, and reduce man to a state of nature—red with blood, and shrouded once more in barbaric ignorance. But you greatly err, if you suppose, because we rely on force, in the last resort, to maintain our supremacy over our slaves, that ours is a stern and unfeeling domination at all to be compared in hard-hearted severity to that exercised, not over the mere laborer only, but by the higher over each lower order, wherever the British sway is acknowledged. You say, that if those you address were "to spend one day in the south, they would return home with impressions against slavery never to be erased." But the fact is universally the reverse. I have known numerous instances, and I never knew of a single one, where there was no other cause of offense and no object to promote by falsehood, that individuals from the non-slaveholding states did not, after residing among us long enough to understand the subject, "return home" to defend our slavery. It is matter of regret that you have never tried the experiment yourself. I do not doubt that you would have been converted, for I give you credit for an honest though perverted mind. You would have seen how weak and futile is all abstract

reasoning about this matter, and that, as a building may not be less elegant in its proportions, or tasteful in its ornaments, or virtuous in its uses, for being based upon granite, so a system of human government, though founded on force, may develop and cultivate the tenderest and purest sentiments of the human heart. And our patriarchal scheme of domestic servitude is indeed well calculated to awaken the higher and finer feelings of our nature. It is not wanting in its enthusiasm and its poetry. The relations of the most beloved and honored chief, and the most faithful and admiring subjects, which, from the time of Homer, have been the theme of song, are frigid and unfeeling compared with those existing between the master and his slaves—who served his father, and rocked his cradle, or have been born to his household, and look forward to serve his children; who have been through life the props of his fortune and the objects of his care; who have partaken of his griefs, and looked to him for comfort in their own; whose sickness he has so frequently watched over and relieved; whose holidays he has so often made joyous by his bounties and his presence; for whose welfare when absent his anxious solicitude never ceases, and whose hearty and affectionate greetings never fail to welcome him home. In this cold, calculating, ambitious world of ours, there are few ties more heartfelt, or of more benignant influence, than those which mutually bind the master and the slave, under our ancient system, handed down from the Father of Israel. The unholy purpose of the abolitionists is to destroy by defiling it; to infuse into it the gall and bitterness which rankle in their own envenomed bosoms; to poison the minds of the master and the servant, turn love to hatred, array "*force*" against force, and hurl all,

"With hideous ruin and combustion, down
To bottomless perdition."

You think it a great "crime" that we do not pay our slaves "wages," and on this account pronounce us "robbers." In my former letter I showed that the labor of our slaves was not without great cost to us, and that, in fact, they themselves receive more in return for it than your hirelings do for theirs. For what purpose do men labor, but to support themselves and their families in what comfort they are able? The efforts of mere physical labor seldom suffice to provide more than a livelihood. And it is a well-known and shocking fact, that while few operatives in Great Britain succeed in securing a comfortable living, the greater part drag out a miserable existence, and sink at last under absolute want. Of what avail is it that you go through the form of paying them a pittance of what you call "wages," when you do not, in return for their services, allow them what alone they

ask, and have a just right to demand—enough to feed, clothe, and lodge them, in health and sickness, with reasonable comfort! Though we do not give “wages” in money, we do this for our slaves, and they are, therefore, better rewarded than yours. It is the prevailing vice and error of the age, and one from which the abolitionists, with all their saintly pretensions, are far from being free, to bring every thing to the standard of money. They make gold and silver the great test of happiness. The American slave must be wretched indeed, because he is not compensated for his services in cash. It is altogether praiseworthy to pay the laborer a shilling a day and let him starve on it. To supply all his wants abundantly, and at all times, yet withhold from him money, is among “the most reprobated crimes.” The fact cannot be denied, that the mere laborer is now, and always has been, everywhere that barbarism has ceased, enlaved. Among the innovations of modern times, following “the decay of villeinage,” has been the creation of a new system of slavery. The primitive and patriarchal, which may also be called the sacred and natural system, in which the laborer is under the personal control of a fellow-being, endowed with the sentiments and sympathies of humanity, exists among us. It has been almost everywhere else superseded by the modern artificial money-power system, in which man, his thaws and sinews, his hopes and affections, his very being, are all subjected to the dominion of *Capital*—a monster without a heart—cold, stern, arithmetical—sticking to the bond—taking ever “the pound of flesh”—working up human life with engines, and retailing it out by weight and measure. His name of old was “Mammon, the least erected spirit that fell from heaven.” And it is to extend his empire, that you and your deluded coadjutors dedicate your lives. You are stirring up mankind to overthrow our heaven-ordained system of servitude, surrounded by innumerable checks, designed and planted deep in the human heart by God and nature, to substitute the absolute rule of this “spirit reprobate,” whose proper place was hell.

You charge us with looking on our slaves “as chattels or brutes,” and enter into a somewhat elaborate argument to prove that they have “human forms,” “talk,” and even “think.” Now the fact is, that however you may indulge in this strain for effect, it is the abolitionists, and not the slaveholders, who, practically, and in the most important point of view, regard our slaves as “chattels or brutes.” In your calculations of the consequences of emancipation, you pass over entirely those which must prove most serious, and which arise from the fact of their being persons. You appear to think that we might abstain from the use of them as readily as if they were machines to be laid aside, or cattle that might be turned out to find pasturage for

themselves. I have, heretofore, glanced at some of the results that would follow from breaking the bonds of so many human beings now peacefully and happily linked into our social system. The tragic horrors, the decay and ruin that would for years, perhaps for ages, brood over our land, if it could be accomplished, I will not attempt to portray. But do you fancy the blight would, in such an event, come to us alone? The diminution of the sugar crop of the West Indies affected Great Britain only, and there, chiefly the poor. It was a matter of no moment to capital, that labor should have one comfort less. Yet it has forced a reduction of the British duty on sugar. Who can estimate the consequences that must follow the annihilation of the cotton crop of the slaveholding states? I do not undervalue the importance of other articles of commerce, but no calamity could befall the world, at all comparable to the sudden loss of two millions of bales of cotton annually. From the deserts of Africa to the Siberian wilds—from Greenland to the Chinese wall—there is not a spot of earth but would feel the sensation. The factories of Europe would fall with a concussion that would shake down castles, palaces, and even thrones; while the “purse-proud, elbowing insolence” of our northern monopolists would disappear for ever under the smooth speech of the pedlar, scouring our frontiers for a livelihood, or the bluff vulgarity of the South Sea whaler, following the harpoon amid storms and shoals. Doubtless, the abolitionists think we could grow cotton without slaves, or that, at worst, the reduction of the crop would be moderate and temporary. Such gross delusions show how profoundly ignorant they are of our condition here.

You declare that “the character of the people of the south has long been that of hardened infidels, who fear not God and have no regard for religion.” I will not repeat what I said in my former letter on this point. I only notice it to ask you how you could possibly reconcile it to your profession of a Christian spirit, to make such a malicious charge—to defile your soul with such a calumny against an unoffending people?

“You are old;
Nature, in you, stands on the very verge
Of her confine. You should be ruled and led
By some discretion.”

May God forgive you.

Akin to this, is the wanton and furious assault made on us by Mr. Macaulay, in his late speech on the sugar duties in the House of Commons, which has just reached me. His denunciations are wholly without measure, and, among other things, he asserts that “Slavery in the United States wears its worst form; that, boasting of our civilization and freedom, and frequenting Christian churches, we breed

up slaves—nay, beget children for slaves, and sell them at so much a head.” Mr. Macaulay is a reviewer, and he knows that he is “nothing if not critical.” The practice of his trade has given him the command of all the alashing and vituperative phrases of our language, and the turn of his mind leads him to the habitual use of them. He is an author, and as no copyright law secures for him from this country a consideration for his writings, he is not only independent of us, but naturally hates every thing American. He is the representative of Edinburgh: it is his cue to decry our slavery, and, in doing so, he may safely indulge the malignity of his temper, his indignation against us, and his capacity for railing. He has suffered once, for being in advance of his time in favor of abolition, and he does not intend that it shall be forgotten, or his claim passed over to any crumb which may now be thrown to the vociferators in the cause. If he does not know that the statements he has made respecting the slaveholders of this country are vile and atrocious falsehoods, it is because he does not think it worth his while to be sure he speaks the truth, so that he speaks to his own purpose.

“*Hic niger est, hunc tu Romane caveto.*”

Such exhibitions as he has made may draw the applause of a British House of Commons, but, among the sound and high minded thinkers of the world, they can only excite contempt and disgust.

But you are not content with depriving us of all religious feelings. You assert that our slavery has also “demoralised the northern states,” and charge upon it, not only every common violation of good order there, but the “Mormon murders,” the “Philadelphia riots,” and all “the exterminating wars against the Indians.” I wonder that you did not increase the list by adding that it had caused the recent inundation of the Mississippi, and the hurricane in the West Indies—perhaps the insurrection of Rebecca, and the war in Scinde. You refer to the law prohibiting the transmission of abolition publications through the mail as a proof of general corruption. You could not do so, however, without noticing the late detected espionage over the British post-office by a Minister of State. It is true, as you say, it “occasioned a general outburst of national feeling,” from the opposition; and a “parliamentary inquiry was instituted,” that is, moved, but treated quite cavalierly. At all events, though the fact was admitted, Sir James Graham yet retains the Home Department. For one, I cannot undertake to condemn him. Such things are not against the laws and usages of your country. I do not know fully what reasons of state may have influenced him and justified his conduct. But I do know that there is a vast difference in point of “national morality,” between the

discretionary power, residing in your government, to open any letter in the public post-office, and a well-defined and limited law to prevent the circulation of certain specified incendiary writings by means of the United States mail.

Having now referred to every thing like argument on the subject of slavery, that is worthy of notice, in your letter, permit me to remark on its tone and style, and very extraordinary bearing upon other institutions of this country. You commence, by addressing certain classes of our people as belonging to “a nation whose character is *now so low* in the estimation of the civilized world”—and, throughout, you maintain this tone. Did the Americans who were “under your roof last summer,” inform you that such language would be gratifying to their fellow-citizens “having no practical concern with slaveholding”? Or do the infamous libels on America which you read in our abolition papers, induce you to believe that all that class of people are, like the abolitionists themselves, totally destitute of patriotism or pride of country? Let me tell you that you are grossly deceived. And, although your stock-brokers and other speculators, who have been bitten in American ventures, may have raised a stunning “cry” against us in England, there is a vast body of people here, besides slaveholders, who justly

“*Deem their own land of every land the pride,
Beloved by Heaven o’er all the world beside;*”

and who *know* that at this moment, we rank among the first powers of the world—a position which we not only claim, but are always ready and able to maintain.

The style you assume in addressing your northern friends is in perfect keeping with your apparent estimation of them. Though I should be the last, perhaps, to criticise mere style, I could not but be struck with the extremely simple manner of your letter. You seem to have thought you were writing a tract for benighted heathen, and telling wonders never before suggested to their imagination, and so far above their untutored comprehension, as to require to be related in the primitive language of “the child’s own book.” This is sufficiently amusing; and would be more so but for the coarse and bitter epithets you continually apply to the poor slaveholders—epithets which appear to be stereotyped for the use of abolitionists, and which form a large and material part of all their arguments.

But perhaps the most extraordinary part of your letter is your bold denunciation of “*the shameful compromises*” of our constitution, and your earnest recommendation to those you address to overthrow or revolutionise it. In so many words you say to them, “*You must either separate yourselves from all political connection with the south, and make your own*

laws; or, if you do not choose such a separation, you must break up *the political ascendancy which the southern have had for so long a time over the northern states.*" The italics in this, as in all other quotations, are your own. It is well for those who circulate your letter here, that the constitution you denounce requires an overt act to constitute treason. It may be tolerated for an American by birth to use, on his own soil, the freedom of speaking and writing which is guaranteed to him, and abuse our constitution, our Union, and our people. But that a foreigner should use such seditious language, in a circular letter addressed to a portion of the American people, is a presumption well calculated to excite the indignation of all. The party known in this country as the abolition party has long since avowed the sentiments you express, and adopted the policy you enjoin. At the recent presidential election they gave over sixty-two thousand votes for their own candidate, and held the balance of power in two of the largest states—wanting but little of doing it in several others. In the last four years their vote has quadrupled. Should the infatuation continue and their vote increase in the same ratio in the next four years, it will be as large as the vote of the *actual slaveholders* of the Union. Such a prospect is doubtless extremely gratifying to you. It gives hope of a contest on such terms as may insure the downfall of slavery or our constitution. The south venerates the constitution, and is prepared to stand by it for ever, *such as it came from the hands of our fathers*; to risk every thing to defend and maintain it in *its integrity*. But the south is under no such delusion as to believe that it derives any *peculiar* protection from the Union. On the contrary, it is well known we incur *peculiar danger*, and that we bear far more than our proportion of the burdens. The apprehension is also fast fading away that any of the dreadful consequences commonly predicted will necessarily result from a separation of the states. And *come what may*, we are firmly resolved that **OUR SYSTEM OF DOMESTIC SLAVERY SHALL STAND**. The fate of the Union then—but, thank God, not of republican government—rests mainly in the hands of the people to whom your letter is addressed—the “professing Christians of the northern states having no concern with slaveholding,” and whom with incendiary zeal you are endeavoring to stir up to strife—without which fanaticism can neither live, move, nor have any being.

We have often been taunted for our sensitiveness in regard to the discussion of slavery. Do not suppose it is because we have any doubts of our rights, or scruples about asserting them. There was a time when such doubts and scruples were entertained. Our ancestors opposed the introduction of slaves into this country, and a feeling adverse to it

was handed down from them. The enthusiastic love of liberty fostered by our revolution strengthened this feeling. And before the commencement of the abolition agitation here, it was the common sentiment that it was desirable to get rid of slavery. Many thought it our duty to do so. When that agitation arose we were driven to a close examination of the subject in all its bearings, and the result has been *universal conviction* that in holding slaves we violate no law of God—inflict no injustice on any of his creatures—while the terrible consequences of emancipation to all parties and the world at large, clearly revealed to us, make us shudder at the bare thought of it. The slaveholders are therefore indebted to the abolitionists for perfect ease of conscience, and the satisfaction of a settled and unanimous determination in reference to this matter. And could their agitation cease now, I believe, after all, the good would preponderate over the evil of it in this country. On the contrary, however, it is urged on with frantic violence, and the abolitionists, reasoning in the abstract, as if it were a mere moral or metaphysical speculation, or a minor question in politics, profess to be surprised at our exasperation. In their ignorance and recklessness they seem to be unable to comprehend our feelings or position. The subversion of our rights, the destruction of our property, the disturbance of our peace, and the peace of the world, are matters which do not appear to arrest their consideration. When revolutionary France proclaimed “Hatred to Kings and unity to the Republic,” and inscribed on her banners, “France risen against tyrants,” she professed to be worshipping “abstract rights.” And if there can be such things, perhaps she was. Yet all Europe rose to put her sublime theories down. They declared her an enemy to the common peace; that her doctrines alone violated the “law of neighborhood,” and, as Mr. Burke said, justly entitled them to anticipate the “*dammum noudum factum*” of the civil law. Danton, Barrere, and the rest, were apparently astonished that umbrage should be taken. The parallel between them and the abolitionists holds good in all respects.

The rise and progress of this fanaticism is one of the phenomena of the age in which we live. I do not intend to repeat what I have already said, or to trace its career more minutely at present. But the legislation of Great Britain will make it historical, and doubtless you must feel some curiosity to know how it will figure on the page of the annalist. I think I can tell you. Though I have accorded, and do accord, to you and your party great influence in bringing about the parliamentary action of your country, you must not expect to go down to posterity as the only cause of it. Though you trace the progenitors of abolition from 1516 through a long stream, with divers branches, down to

the period of its triumph in your country, it has not escaped contemporaries, and will not escape posterity, that England, without much effort, sustained the storm of its scoffs and threats until the moment arrived when she thought her colonies fully supplied with Africans; and declared against the slave-trade only when she deemed it unnecessary to her, and when her colonies, full of slaves, would have great advantages over others not so well provided. Nor did she agree to West India emancipation until, discovering the error of her previous calculation, it became an object to have slaves free throughout the western world, and on the ruins of the sugar and cotton growers of America and the Islands, to build up her great slave empire in the East; while her indefatigable exertions, still continued, to engraft the right of search upon the law of nations, on the plea of putting an end to the forever increasing slave-trade, are well understood to have chiefly in view the complete establishment of her supremacy at sea. On these points let me recommend you to consult a very able Essay on the Slave-trade and Right of Search by M. Jollivet, recently published; and as you say, since writing your circular letter, that you "burn to try your hand on another little essay if a subject could be found," I propose to you to "try" to answer this question, put by M. Jollivet to England: "*Pourquoi sa philanthropie n'a pas daigné, jusqu'à présent, doubler le cap de Bonne-Espérance!*" Nor must you flatter yourself that your party will derive historic dignity from the names of the illustrious British statesmen who have acted with it. Their country's ends were theirs. They have stooped to use you, as the most illustrious men will sometimes use the vilest instruments, to accomplish their own purposes. A few philanthropic common-places and rhetorical flourishes, "in the abstract," have secured them your "sweet voices" and your influence over the tribe of mawkish sentimentalists. Wilberforce may have been yours, but what was he besides but a wealthy county member! You must therefore expect to stand on your own merits alone before posterity, or rather that portion of it that may be curious to trace the history of the delusions which from time to time pass over the surface of human affairs, and who may trouble themselves to look through the ramifications of transcendentalism in this era of extravagances. And how do you expect to appear in their eyes! As Christians, proudly endeavoring to enforce the will of God and carry out the principles of Christianity! Certainly not; since you deny or pervert the Scriptures in the doctrines you advance, and in your conduct furnish a glaring contrast to the examples of Christ and the apostles. As philanthropists devoting yourselves to the cause of humanity, relieving the needy, comforting the

afflicted, creating peace and gladness and plenty round about you! Certainly not; since you turn from the needy, the afflicted; from strife, sorrow, and starvation which surround you; close your eyes and hands upon them; shut out from your thoughts and feelings the human misery which is real tangible, and within your reach, to indulge your morbid imagination in conjuring up woes and wants among a strange people in distant lands, and offering them succor in the shape of costless denunciations of their best friends, or by scattering among them "fire-brands, arrows, and death." Such folly and madness—such wild mockery and base imposture—can never win for you, in the sober judgment of future times, the name of philanthropists. Will you even be regarded as worthy citizens! Scarcely, when the purposes you have in view can only be achieved by revolutionizing governments and overturning social systems, and when you do not hesitate zealously and earnestly to recommend such measures. Be assured, then, that posterity will not regard the abolitionists as Christians, philanthropists, or virtuous citizens. It will, I have no doubt, look upon the mass of the party as silly enthusiasts, led away by designing characters, as is the case with all parties that break from the great, acknowledged ties which bind civilized man in fellowship. The leaders themselves will be regarded as *mere ambitious men*; not taking rank with those whose ambition is "eagle-winged and sky-aspiring," but belonging to that mean and selfish class who are instigated by "rival-hating envy," and whose base thirst is for *notoriety*; who cloak their designs under vile and impious hypocries, and, unable to shine in higher spheres, devote themselves to fanaticism as a trade. And it will be perceived that, even in that, they shunned the highest walk. Religious fanaticism was an old established vocation, in which something brilliant was required to attract attention. They could not be George Foxes, nor Joanna Southcotes, nor even Joe Smiths. But the dullest pretender could discourse a jumble of pious bigotry, natural rights, and drivelling philanthropy; and, addressing himself to aged folly and youthful vanity, to ancient women, to ill-gotten wealth, to the reckless of all classes who love excitement and change, offer all the cheapest and the safest glory in the market. Hence, their numbers; and, from number and clamor, what impression they have made on the world.

Such I am persuaded is the light in which the abolitionists will be viewed by the posterity their history may reach. Unless, indeed—which God forbid—circumstances should so favor as to enable them to produce a convulsion which may elevate them higher on the "bad eminence" where they have placed themselves.

NEGRO SLAVERY. — MR. CALHOUN'S LETTER TO MR. KING. BRITISH MOVEMENTS IN TEXAS; HER EMANCIPATION SCHEMES AND THEIR FAILURE; HER POLICY IN REGARD TO SLAVERY.

DEPARTMENT OF STATE,
Washington, August 12, 1844. }

SIR :—I have laid your dispatch, No. 1, before the President, who instructs me to make known to you that he has read it with pleasure, especially the portion which relates to your cordial reception by the king, and his assurance of friendly feelings toward the United States. The President, in particular, highly appreciates the declaration of the king, that, in no event, would any steps be taken by his government in the slightest degree hostile, or which would give to the United States just cause of complaint. It was the more gratifying from the fact, that our previous information was calculated to make the impression, that the government of France was prepared to unite with Great Britain in a joint protest against the annexation of Texas, and a joint effort to induce her government to withdraw her proposition to annex, on condition that Mexico should be made to acknowledge her independence. He is happy to infer from your dispatch, that the information, as far as it relates to France, is, in all probability, without foundation. You did not go further than you ought in assuring the king that the object of annexation would be pursued with unabated vigor, and in giving your opinion that a decided majority of the American people were in its favor, and that it would certainly be annexed at no distant day. I feel confident that your anticipation will be fully realized at no distant period. Every day will tend to weaken that combination of political causes which led to the opposition of the measure, and to strengthen the conviction that it was not only expedient, but just and necessary.

You were right in making the distinction between the interests of France and England, in reference to Texas—or rather, I would say, the apparent interests of the two countries. France cannot possibly have any other than commercial interest in desiring to see her preserve her separate independence; while it is certain that England looks beyond to political interests, to which she apparently attaches much importance. But, in our opinion, the interest of both against the measure is more apparent than real; and that neither France, England, nor even Mexico herself, has any in opposition to it, when the subject is fairly viewed and considered in its whole extent and in all its bearings. Thus viewed and considered, and assuming that peace, the extension of commerce, and security, are objects of primary policy with them, it may, as it seems to me, be readily shown

that the policy on the part of those powers which would acquiesce in a measure so strongly desired by both the United States and Texas, for their mutual welfare and safety, as the annexation of the latter to the former, would be far more promotive of these great objects than that which would attempt to resist it.

It is impossible to cast a look at the map of the United States and Texas, and to note the long, artificial, and inconvenient line which divides them, and then to take into consideration the extraordinary increase of population and growth of the former, and the source from which the latter must derive its inhabitants, institutions and laws, without coming to the conclusion that it is their destiny to be united, and, of course, that annexation is merely a question of *time* and *mode*. Thus regarded, the question to be decided would seem to be, whether it would not be better to permit it to be done now, with the mutual consent of both parties, and the acquiescence of these powers, than to attempt to resist and defeat it. If the former course be adopted, the certain fruits would be the preservation of peace, great extension of commerce by the rapid settlement and improvement of Texas, and increased security, especially to Mexico. The last, in reference to Mexico, may be doubted; but I hold it not less clear than the other two.

It would be a great mistake to suppose that this government has any hostile feelings towards Mexico, or any disposition to aggrandize itself at her expense. The fact is the very reverse.

It wishes her well, and desires to see her settled down in peace and security; and is prepared, in the event of the annexation of Texas, if not forced into conflict with her, to propose to settle with her the question of boundary, and all others growing out of the annexation, on the most liberal terms. Nature herself has clearly marked the boundary between her and Texas by natural limits too strong to be mistaken. There are few countries whose limits are so distinctly marked; and it would be our desire, if Texas should be united to us, to see them firmly established, as the most certain means of establishing permanent peace between the two countries, and strengthening and cementing their friendship. Such would be the certain consequence of permitting the annexation to take place now, with the acquiescence of Mexico; but very different would be the case if it should be attempted to resist and defeat it, whether the attempt should be successful for the present or not. Any attempt of the kind would, not improbably, lead to a conflict between us and Mexico, and involve consequences, in reference to her and the general peace, long to be deplored on all sides, and difficult to be repaired. But should that not be the case, and the in-

interference of another power defeat the annexation for the present, without the interruption of peace, it would but postpone the conflict, and render it more fierce and bloody whenever it might occur. Its defeat would be attributed to enmity and ambition on the part of that power by whose interference it was occasioned, and excite deep jealousy and resentment on the part of our people, who would be ready to seize the first favorable opportunity to effect by force, what was prevented from being done peaceably by mutual consent. It is not difficult to see how greatly such a conflict, come when it might, would endanger the general peace, and how much Mexico might be the loser by it.

In the mean time, the condition of Texas would be rendered uncertain, her settlement and prosperity in consequence retarded, and her commerce crippled, while the general peace would be rendered much more insecure. It could not but greatly affect us. If the annexation of Texas should be permitted to take place peaceably now, (as it would, without the interference of other powers,) the energies of our people would, for a long time to come, be directed to the peaceable pursuits of redeeming, and bringing within the pale of cultivation, improvements and civilization, that large portion of the continent lying between Mexico on one side, and the British possessions on the other, which is now, with little exception, a wilderness with a sparse population, consisting, for the most part, of wandering Indian tribes.

It is our destiny to occupy that vast region; to intersect it with roads and canals; to fill it with cities, towns, villages and farms; to extend over it our religion, customs, constitution and laws; and to present it as a peaceful and splendid addition to the domains of commerce and civilization. It is our policy to increase, by growing and spreading out into unoccupied regions, assimilating all we incorporate: in a word, to increase by accretion, and not, through conquest, by the addition of masses held together by the cohesion of force. No system can be more unsuited to the latter process, or better adapted to the former, than our admirable federal system. If it should not be resisted in its course, it will probably fulfil its destiny without disturbing our neighbors, or putting in jeopardy the general peace; but if it be opposed by foreign interference, a new direction would be given to our energy, much less favorable to harmony with our neighbors, and to the general peace of the world.

The change would be undesirable to us, and much less in accordance with what I have assumed to be primary objects of policy on the part of France, England, and Mexico.

But, to descend to particulars: it is certain that while England, like France, desires the independence of Texas, with the view to com-

mercial connections; it is not less so, that one of the leading motives of England for desiring it is the hope that, through her diplomacy and influence, negro slavery may be abolished there, and ultimately, by consequence, in the United States, and throughout the whole of this continent. That its ultimate abolition throughout the entire continent is an object ardently desired by her, we have decisive proof in the declaration of the Earl of Aberdeen, delivered to this department, and of which you will find a copy among the documents transmitted to Congress with the Texan treaty. That she desires its abolition in Texas, and has used her influence and diplomacy to effect it there, the same document, with the correspondence of this department with Mr. Pakenham, also to be found among the documents, furnishes proof not less conclusive. That one of the objects of abolishing it there is to facilitate its abolition in the United States, and throughout the continent, is manifest from the declaration of the abolition party and societies, both in this country and in England. In fact, there is good reason to believe that the scheme of abolishing it in Texas, with the view to its abolition in the United States and over the continent, originated with the prominent members of the party in the United States; and was first broached by them in the (so called) World's Convention, held in London in the year 1840, and through its agency brought to the notice of the British government.

Now, I hold, not only that France can have no interest in the consummation of this grand scheme, which England hopes to accomplish through Texas, if she can defeat the annexation; but that her interest, and those of all the continental powers of Europe, are directly and deeply opposed to it.

It is too late in the day to contend that humanity or philanthropy is the great object of the policy of England in attempting to abolish African slavery on this continent. I do not question but humanity may have been one of her leading motives for the abolition of the African slave trade, and that it may have had a considerable influence in abolishing slavery in her West India possessions—aided, indeed, by the fallacious calculation that the labor of the negroes would be at least as profitable, if not more so, in consequence of the measure. She acted on the principle that tropical products can be produced cheaper by free African labor and East India labor, than by slave labor. She knew full well the value of such products to her commerce, navigation, navy, manufactures, revenue and power. She was not ignorant that the support and the maintenance of her political preponderance depended on her tropical possessions, and had no intention of diminishing their productive-ness, nor any anticipation that such would be the effect when the scheme of abolishing

slavery in her colonial possessions was adopted. On the contrary, she calculated to combine philanthropy with profit and power, as is not unusual with fanaticism. Experience has convinced her of the fallacy of her calculations. She has failed in all her objects. The labor of her negroes has proved far less productive, without affording the consolation of having improved their condition.

The experiment has turned out to be a costly one. She expended nearly one hundred millions of dollars in indemnifying the owners of the emancipated slaves. It is estimated that the increased price paid since, by the people of Great Britain, for sugar and other tropical productions, in consequence of the measure, is equal to half that sum; and that twice that amount has been expended in the suppression of the slave trade; making, together, two hundred and fifty millions of dollars as the cost of the experiment. Instead of realizing her hope, the result has been a sad disappointment. Her tropical products have fallen off to a vast amount. Instead of supplying her own wants and those of nearly all Europe with them, as formerly, she has now, in some of the most important articles, scarcely enough to supply her own. What is worse, her own colonies are actually consuming sugar produced by slave labor, brought direct to England, or refined in bond, and exported and sold in her colonies as cheap or cheaper than they can be produced there; while the slave trade, instead of diminishing, has been in fact carried on to a greater extent than ever. So disastrous has been the result, that her fixed capital vested in tropical possessions, estimated at the value of nearly five hundred millions of dollars, is said to stand on the brink of ruin.

But this is not the worst. While this costly scheme has had such ruinous effects on the tropical productions of Great Britain, it has given a powerful stimulus, followed by a corresponding increase of products, to those countries which have had the good sense to shun her example. There has been vested, it is estimated by them, in the production of tropical products, since 1808, in fixed capital, nearly \$4,000,000,000, wholly dependent on slave labor. In the same period, the value of their products has been estimated to have risen from about \$72,000,000 annually, to nearly \$220,000,000; while the whole of the fixed capital of Great Britain, vested in cultivating tropical products, both in the East and West Indies, is estimated at only about \$830,000,000, and the value of the products annually at about \$50,000,000. To present a still more striking view of three articles of tropical products, (sugar, coffee, and cotton,) the British possessions, including the West and East Indies, and Mauritius, produced, in 1842, of sugar, only 3,993,771 pounds; while Cuba, Brazil, and the United States, ex-

cluding other countries having tropical possessions, produced 9,600,000 pounds; of coffee, the British possessions produced only 27,393,008, while Cuba and Brazil produced 201,590,125 pounds; and of cotton, the British possessions, including shipments to China, only 137,443,446 pounds, while the United States alone produced 790,479,275 pounds.

The above facts and estimates have all been drawn from a British periodical of high standing and authority,* and are believed to be entitled to credit.

This vast increase of the capital and production on the part of those nations who have continued their former policy toward the negro race, compared with that of Great Britain, indicates a corresponding relative increase of the means of commerce, navigation, manufactures, wealth and power. It is no longer a question of doubt, that the great source of the wealth, prosperity, and power of the more civilized nations of the temperate zone, (especially Europe, where the arts have made the greatest advance,) depends, in a great degree, on the exchange of their products with those of the tropical regions. So great has been the advance made in the arts, both chemical and mechanical, within the few last generations, that all the old civilized nations can, with but a small part of their labor and capital, supply their respective wants; which tends to limit within narrow bounds the amount of the commerce between them, and forces them all to seek for markets in the tropical regions, and the more newly settled portions of the globe. Those who can best succeed in commanding those markets, have the best prospect of outstripping the others in the career of commerce, navigation, manufactures, wealth and power.

This is seen and felt by British statesmen, and has opened their eyes to the errors which they have committed. The question now with them is, how shall it be counteracted? What has been done cannot be undone. The question is, by what means can Great Britain regain and keep a superiority in tropical cultivation, commerce and influence? Or, shall that be abandoned, and other nations be suffered to acquire the supremacy, even to the extent of supplying British markets, to the destruction of the capital already vested in their production? These are the questions which now profoundly occupy the attention of her statesmen, and have the greatest influence over her councils.

In order to regain her superiority, she not only seeks to revive and increase her own capacity to produce tropical productions, but to diminish and destroy the capacity of those who have so far outstripped her in consequence of her error. In pursuit of the former, she has cast her eyes to her East India pos-

sessions—to central and eastern Africa—with the view of establishing colonies there, and even to restore, substantially, the slave trade itself, under the specious name of transporting free laborers from Africa to her West India possessions, in order, if possible, to compete successfully with those who have refused to follow her suicidal policy. But these all afford but uncertain and distant hopes of recovering her lost superiority. Her main reliance is on the other alternative—to cripple or destroy the productions of her successful rivals. There is but one way by which it can be done, and that is by abolishing African slavery throughout this continent; and that she openly avows to be the constant object of her policy and exertions. It matters not how, or from what motive, it may be done: whether it may be by diplomacy, influence or force; by secret or open means; and whether the motive be humane or selfish, without regard to manner, means or motive. The thing itself, should it be accomplished, would put down all rivalry and give her the undisputed supremacy in supplying her own wants and those of the rest of the world; and thereby more than fully retrieve what she has lost by her errors. It would give her the monopoly of tropical productions, which I shall next proceed to show.

What would be the consequence if this object of her unceasing solicitude and exertions should be effected by the abolition of negro slavery throughout this continent, some idea may be formed from the immense diminution of productions, as has been shown, which has followed abolition in her West India possessions. But, as great as that has been, it is nothing compared to what would be the effect if she should succeed in abolishing slavery in the United States, Cuba, Brazil, and throughout this continent. The experiment in her own colonies was made under the most favorable circumstances. It was brought about gradually and peaceably, by the steady and firm operation of the parent country, armed with complete power to prevent or crush at once all insurrectionary movements on the part of the negroes, and able and disposed to maintain to the full the political and social ascendancy of the former masters over their former slaves. It is not at all wonderful that the change of the relations of master and slave took place, under such circumstances, without violence and bloodshed, and that order and peace should have been since preserved. Very different would be the result of abolition, should it be effected by her influence and exertions in the possessions of other countries on this continent, and especially in the United States, Cuba, and Brazil, the great cultivators of the principal tropical products of America. To form a correct conception of what would be the result with them, we must look not to Jamaica, but to St.

Domingo, for example. The change would be followed by unforgiving hate between the two races, and end in a bloody and deadly struggle between them for the superiority. One or the other would have to be subjugated, extirpated, or expelled; and desolation would overspread their territories, as in St. Domingo, from which it would take centuries to recover. The end would be, that the superiority in cultivating the great tropical staples would be transferred from them to the British tropical possessions.

They are of vast extent, and those beyond the Cape of Good Hope possessed of an unlimited amount of labor, standing ready, by the aid of British capital, to supply the deficit which would be occasioned by destroying the tropical productions of the United States, Cuba, Brazil, and other countries cultivated by slave labor on this continent, so soon as the increased price, in consequence, would yield a profit. It is the successful competition of that labor which keeps the prices of the great tropical staples so low as to prevent their cultivation with profit in the possessions of Great Britain, by what she is pleased to call free labor. If she can destroy its competition, she would have a monopoly in those productions. She has all the means of furnishing an unlimited supply—vast and fertile possessions in both Indies, boundless command of capital and labor, and ample power to suppress disturbances, and preserve order throughout her wide domains.

It is unquestionable that she regards the abolition of slavery in Texas as a most important step toward this great object of policy, so much the aim of her solicitude and exertions; and the defeat of the annexation of Texas to our Union as indispensable to the abolition of slavery there. She is too sagacious not to see what a fatal blow it would give to slavery in the United States, and how certainly its abolition with us would abolish it over the whole continent, and thereby give her a monopoly in the productions of the great tropical staples, and the command of the commerce, navigation, and manufactures of the world, with an established naval ascendancy and political preponderance. To this continent the blow would be calamitous beyond description. It would destroy, in a great measure, the cultivation and production of the great tropical staples, amounting annually in value to nearly \$300,000,000—the fund which stimulates and upholds almost every other branch of its industry, commerce, navigation, and manufactures. The whole, by their joint influence, are rapidly spreading population, wealth, improvement and civilization over the whole continent, and vivifying by their overflow the industry of Europe, thereby increasing its population, wealth, and advancement in the arts, in power, and in civilization.

Such must be the result, should Great Britain succeed in accomplishing the constant object of her desire and exertions, the abolition of negro slavery over this continent; and toward the effecting of which, she regards the defeat of the annexation of Texas to our Union so important. Can it be possible that governments so enlightened and sagacious as those of France and the other great continental powers, can be so blinded by the plea of philanthropy as not to see what must inevitably follow, be her motive what it may, should she succeed in her object? It is little short of mockery to talk of philanthropy, with the examples before us of the effects of abolishing negro slavery in her own colonies, in St. Domingo, and the northern states of our Union, where statistical facts not to be shaken prove that the freed negro, after the experience of sixty years, is in a far worse condition than in the other states, where he has been left in his former condition. Now the effect of what is called abolition, where the number is few, is not to raise the inferior race to the condition of freemen, but to deprive the negro of the guardian care of his owner, subject to all the depression and oppression belonging to his inferior condition. But, on the other hand, where the number is great, and bears a large proportion to the whole population, it would be still worse. It would be to substitute for the existing relation a deadly strife between the two races, to end in the subjection, expulsion or extirpation of one or the other; and such would be the case over the greater part of this continent where negro slavery exists. It would not end there, but would in all probability extend, by its example, the war of races all over South America, including Mexico, and extending to the Indian as well as to the African race, and make the whole one scene of blood and devastation.

Dismissing, then, the stale and unfounded plea of philanthropy, can it be that France and the other great continental powers—seeing what must be the result of the policy for the accomplishment of which England is constantly exerting herself, and that the defeat of the annexation of Texas is so important toward its consummation—are prepared to back or countenance her in her efforts to effect either? What possible motives can they have to favor her cherished policy? Is it not better for them that they should be supplied with tropical products in exchange for their labor, from the United States, Brazil, Cuba, and this continent generally, than to be dependent on one great monopolizing power for their supplies? Is it not better they should receive them at the low prices which competition, cheaper means of production, and nearness of market, would furnish them by the former, than to give the high prices which monopoly, dear labor, and great distance from market would impose? Is it not

better that their labor should be exchanged with a new continent, rapidly increasing in population and the capacity of consuming, and which would furnish in the course of a few generations a market nearer to them, and of almost unlimited extent, than with one whose population has long since reached its growth?

The above contains those enlarged views of policy which, it seems to me, an enlightened European statesman ought to take, in making up his opinion on the subject of the annexation of Texas, and the grounds, as it may be inferred, on which England vainly opposes it. They certainly involve considerations of the deepest importance, and demanding the greatest attention. Viewed in connection with them, the question of annexation becomes one of the first magnitude, not only to Texas and the United States, but to this continent and Europe. They are presented that you may use them on all suitable occasions where you think they may be with effect; in your correspondence, where it can be done with propriety or otherwise. The President relies with confidence on your sagacity, prudence and zeal. Your mission is one of the first magnitude at all times, but especially now; and he feels assured nothing will be left undone on your part to do justice to the country and the government in reference to this great measure.

I have said nothing as to your right of treating with Texas without consulting Mexico. You so fully understand the grounds on which we rest our right, and are so familiar with all the facts necessary to maintain them, that it was not thought necessary to add any thing in reference to it.

NEGROES.—SLAVE LAWS OF THE SOUTH.—This essay, the production of the Hon. J. B. O'Neill of South Carolina, though based upon the slave system of that state, gives a fair idea of the system throughout the entire south. Most of the ameliorations which are proposed would have been carried out long ago but for the officious and crazy influence of the abolitionists of the north. Many of the states have acted upon them; all will if let alone. There are "beams" enough in the world to remove before this "mote."—(Ed.)

The Status of the Negro, his Rights and Disabilities.—The act of 1740, sec. 1, declares all negroes and Indians (free Indians in amity with this government, negroes, mulattoes, and mestizoes, who now are free, excepted) to be slaves: the offspring to follow the condition of the mother: and that such slaves are chattels personal.

Under this provision it has been uniformly held, that color is *prima facie* evidence that the party bearing the color of a negro, mulatto or mestizo, is a slave; but the same *prima facie* result does not follow from the Indian color.

Indians, and descendants of Indians, are regarded as free Indians in amity with this government, until the contrary be shown. In the second proviso of sec. 1, of the act of 1740, it is declared, that "every negro, Indian, mulatto and mestizo, is a slave, unless the contrary can be made to appear;" yet, in the same it is immediately thereafter provided—"the Indians in amity with this government excepted, in which case the burden of proof shall lie on the defendant," that is, on the person claiming the Indian plaintiff to be a slave. This latter clause of the proviso is now regarded as furnishing the rule. The race of slave Indians, or of Indians not in amity to this government, (the state,) is extinct, and hence the previous part of the proviso has no application.

The term negro is confined to slave Africans (the ancient Berbers) and their descendants. It does not embrace the free inhabitants of Africa, such as the Egyptians, Moors, or the negro Asiatics, such as the Lascars.

Mulatto is the issue of the white and the negro.

When the mulatto ceases, and a party bearing some slight taint of the African blood ranks as white, is a question for the solution of a jury.

Whenever the African taint is so far removed, that upon inspection, a party may be fairly pronounced to be white, and such has been his or her previous reception into society, and enjoyment of the privileges usually enjoyed by white people, the jury may rate and regard the party as white.

No specific rule, as to the quantity of negro blood which will compel a jury to find one to be a mulatto, has ever been adopted. Between one quarter and one eighth seems fairly to be debatable ground. When the blood is reduced to, or below one eighth, the jury ought always to find the party *white*. When the blood is one quarter or more African, the jury must find the party a mulatto.

The question of color, and of course of caste, arises in various ways; and may, in some cases, be decided without the intervention of a jury. As when a party is convicted and brought up for sentence, or a witness on the stand objected to as a free negro, mulatto, or mestizo, in these cases, if the color be so obvious that there can be no mistake about it, the judge may refuse to sentence, or may exclude the witness; still, if the party, against whose color the decision may be made, should claim to have the question tried by a jury, it must, I apprehend, be so tried.

There are three classes of cases, in which the question of color, and of course, of caste, most commonly occurs. 1st. Prohibition against inferior courts, or the tax collector. 2d. Objections to witnesses offered to testify in the superior courts. 3d. Actions of slander for

words charging the plaintiff with being a mulatto.

In the first class, free negroes, mulattoes, and mestizos, are liable to be tried for all offenses, by a magistrate and five freeholders, (except in Charleston, where two magistrates must sit,) and of course, any person claiming to be white, (over whom, if that be true, they have no jurisdiction,) charged before them criminally, may object to their jurisdiction, and if they persist in trying him or her, may apply for, and on making good the allegation, is entitled to have the writ of prohibition. It seems if the party submit to have the question of jurisdiction tried by the inferior court, he will be concluded.

The writ of prohibition is generally granted, nisi, on a suggestion sworn to by the relator, by any judge at chambers, on notice being given to the court claiming jurisdiction; but if the fact be uncontroverted, or so plain as not to admit of doubt, that the relator is white, the judge may at once grant an absolute prohibition. Generally, however, an issue is ordered to be made up on granting the prohibition, nisi, in which the relator is plaintiff, and on the jury finding the relator to be a free white person, the prohibition is made absolute.

In this class, too, the tax collectors frequently issue tax executions for capitation taxes, against persons whom they suppose to be free negroes, mulattoes, or mestizos, ("free persons of color," as they are sometimes loosely called.) If the person or persons against whom they are issued be not liable to the tax, they may, on a suggestion, move for, and have the writ of prohibition.

In such cases, where, from the affidavits accompanying the suggestion, it appears that the relator or relators has or have been received in society as white, and has or have enjoyed the privileges of a white person, or of white people, I have uniformly made the order for prohibition to become absolute, if the tax collector did not within a given time file his suggestions contesting the status of the relator or relators. This course has been adopted, because the tax collector has no jurisdiction over the person of the relator, and has no judicial authority whatever to decide the question of caste. His execution is predicated of an assumed fact. He is, therefore, bound to make that good, before he can collect the tax. This course has been found extremely convenient, as it has cut off an immense amount of litigation. For, generally, the tax collectors exercise a sound and honest discretion, in pursuing only those cases where there seems to be no room to doubt the degraded caste of the relator or relators.

Where, however, there is to be a question as to the color of the relator or relators, the court may, in its discretion, cast the burden

of proof on the tax collector, or the relator. Generally, I think, it should be cast on the tax collector, as his execution is the first allegation of the color of the relator. As the issue may result, the writ of prohibition is made absolute or dissolved.

In all the cases of the first class, the decision is conclusive; in all subsequent cases, civil or criminal. For the prohibition is in the nature of a criminal proceeding, operating *in rem*, and binds not only the parties, but also all the people of the commonwealth. So it seems, that any decision made in favor of the caste of the relator, as white, may be given in evidence in his favor.

In the second class, the objection to the competency of the witness makes the issue collateral, and it is tried *instanter*, without any formal issue being made up, and the finding is upon the record on trial. The verdict, in such a case, concludes nothing beyond the question of competency in that case. It, however, might be given in evidence for or against the witness, not as conclusive, but as a circumstance having weight in settling the question of status, in all other cases.

In the third class, where jurisdiction is pleaded and found, it would seem to forever conclude the plaintiff from re-agitating the question. But, where the defense is as usual, that the defendant had good reason to suspect and believe that the plaintiff was, as he alleged, a mulatto, in such case, a finding of nominal damages sustains the defense, yet it concludes not the plaintiff from afterward averring and proving that he was white.

Free Indians and their descendants, unmingled by African blood, are entitled to all the privileges of white men, except that of suffrage and office. The former, and of consequence the latter, has been denied to a pure Indian, living among the whites. The foregoing principle, resulting from the case cited in the margin, is, I am persuaded, wrong. The term white, ("free white man,") used in our constitution, is comparative merely: it was intended to be used in opposition to the colors resulting from the slave blood. The case should be reviewed, and I trust the decision will be reversed; for the case in which it was made will always condemn it. The relator, the Rev. John Mush, was an Indian, of the Pawmunki tribe of Indians, in Virginia; he was a soldier of the revolution; he had as such taken the oath of allegiance. He was sent out as a missionary to the Catawbas. He, however, did not reside among them; he lived among the white inhabitants of York District, where he had resided for many years. He was a man of unexceptionable character. Yet, strange to say, he was held not to be entitled to vote. If that decision be right, how long is the objection to prevail! When is the descendant of an Indian to be regarded as white? Is it, that he is not to be so re-

garded, until a jury shall find him to be white, on account of the great preponderance of the white blood! But the Indian blood, like that of the white, is the blood of freedom; there is nothing degrading in it; and hence, therefore, the Indian and his descendants may well claim to be white within the legal meaning of our constitution.

A mestizo is the issue of a negro and an Indian, and is subject to all the disabilities of a free negro and mulatto.

The burden of proof of freedom rests upon the negro, mulatto, or mestizo, claiming to be free.

Under the act of 1740, 1st sec., 1st proviso, and the act of 1799, it is provided, if any negro, mulatto or mestizo shall claim his or her freedom, he may, on application to the clerk of the Court of Common Pleas of the District, have a guardian appointed, who is authorized to bring an action of trespass, in the nature of ravishment of ward, against any person claiming property in the said negro, mulatto or mestizo, or having possession of the same; in which action the general issue may be pleaded, and the special circumstances given in evidence; and upon a general or special verdict found, judgment shall be given according to the very right of the case, without any regard to defects in the proceeding, in form or substance. In such case, if the verdict be that the ward of the plaintiff is free, a special entry shall be made declaring him to be free; and the jury is authorized to assess damages which the plaintiff's ward may have sustained, and the court is directed to give judgment, and award execution for the damages and cost; but if judgment is given for the defendant, then the court is authorized to inflict corporal punishment on the ward of the plaintiff, not extending to life or limb. Under the second section of the act of 1740, it is provided, that the defendant in such action shall enter into a recognizance with one or more sufficient sureties to the plaintiff, in such sum as the Court of Common Pleas may direct, conditioned to produce the ward of the plaintiff, at all times when required by the court, and that while the action or suit is pending, he shall not be eloiigned, abused or misused.

Under the 1st proviso, the action of trespass in the nature of ravishment of ward, is an action sounding altogether in damages. The finding for the plaintiff is altogether of damages, which may be made up of the value of the services of the plaintiff's ward, and recompense for any abuse or injury which he may sustain. For such damages and the costs, the judgment is entered up, and execution issues.

Under the act, the court is authorized, on such finding for the plaintiff, to make a special entry, that the ward of the plaintiff is free. This entry ought to recite the action, the

finding of the jury, and then should follow the order of the court, that the plaintiff's ward is free, and that he be discharged from the service of the defendant. This should be spread on the minutes of the court. This entry is, it seems, evidence of the freedom of the plaintiff's ward in all other cases, and against all other persons. It is only conclusive, however, against the defendant; against all other persons, it is *prima facie* merely. Under the 2d section, the proceeding is by petition, setting out the action brought to recover the freedom of the negro, the possession by the defendant, with a prayer that the defendant enter into the recognizance required by law. If this order be disobeyed, the defendant may be attached for a contempt, until it be obeyed; or it may be in analogy to the decision under the Trover Act, that the sheriff might arrest the defendant under the order, and keep him in custody until he entered into the recognizance. I never knew the order made but once, and that was in the case of Spear and Galbreath, guardians of Charles, vs. Rica.—Harp. 20. In that case, the order was complied with by the defendant on notice of it.

The evidence of freedom is as various as the cases.

Proof that a negro has been suffered to live in a community for years as a freeman, is *prima facie* proof of freedom.

If, before the act of 1820, a negro was at large, without an owner, and acting as a freeman for twenty years, the court would presume *omnia esse rita acta*, and every muniment necessary to give effect to freedom to have been properly executed.

This rule applies also, when freedom has been begun to be enjoyed before the act of 1820, and the twenty years are completed after.

Before the act of 1800, (hereafter to be adverted to,) any thing which showed that the owner had deliberately parted with his property, and dissolved the *vinculum servitii*, was enough to establish freedom.

The validity of freedom depends upon the law of the place where it begins. Hence, when slaves have been manumitted in other states, and are found in this state, their freedom here will depend on the validity of the manumission at the place whence they came.

By the 7th, 8th and 9th sections of the act of 1800, it was provided, that emancipation could only take effect by deed; that the owner intending to emancipate a slave should, with the slave, appear before a justice of the quorum and five freeholders of the vicinage, and upon oath, answer all such questions as they might ask touching the character and capability of the slave to gain a livelihood in an honest way. And if, upon such examination, it appeared to them the slave was not of bad character, and was capable of gaining a

livelihood in an honest way, they were directed to endorse a certificate upon the deed to that effect; and upon the said deed and certificate being recorded in the clerk's office, within six months from the execution, the emancipation was declared to be legal and valid, otherwise, that it was void. The person emancipating was directed by the 8th section, to deliver to the slave a copy of the deed of emancipation, attested by the clerk, within ten days after such deed shall have been executed.

The person emancipating, neglecting or refusing to deliver such copy, was, by the 9th section, declared to be liable to a fine of \$50, with costs, to be recovered by any one who shall sue for the same.

It was also provided by the 9th section, that a slave emancipated contrary to this act, may be seized, and made property by any one.

It was held, for a long time, that when a will directed slaves to be free, or to be set free, that they were liable to seizure, as illegally emancipated. But the cases of Lenoir vs. Sylvester, and Young vs. the same, put that matter right. In them, it was held that a bequest of freedom was not void under the act of 1800; that it could have no effect until the executor assented; that when he did assent, it was his duty to so assent as to give legal effect to the bequest. As legal owner, he could execute the deed, appear before the magistrate and freeholders, answer the questions, and do every act required by the law, and thus make the emancipation legal.

A slave illegally emancipated was free, as against the rights of the owner, under the act of 1800; he could only restore himself to his rights by capture. The act of 1820 declares that no slave shall be emancipated but by act of the legislature. Still it has been held, in Linam vs. Johnson, and many subsequent cases, that if a slave be in any other way emancipated, he may, under the provision of the act of 1800, be seized as derelict.

The delivery of the deed of emancipation to the clerk to be recorded, is all the delivery necessary to give it legal effect; and the delivery to the clerk is equivalent to recording.

The act of 1820, declaring that no slave should hereafter be emancipated but by act of the legislature, introduced a new, and, as I think, an unfortunate provision in our law. All laws unnecessarily restraining the rights of owners are unwise. So far as may be necessary to preserve the peace and good order of the community, they may be properly restrained. The act of 1800 was of that kind. The act of 1820, instead of regulating, cut off the power of emancipation. Like all of its class, it has done harm instead of good. It has caused evasions without number. These have been successful by vesting the ownership

in persons legally capable of holding it, and thus substantially conferring freedom when it was legally denied.

So, too, bequests or gifts for the use of such slaves were supported under the rule, that whatever is given to the slave belongs to the master.

Since the act of 1820, if a negro be at large, and enjoy freedom for twenty years, he or she is still a slave; as an act of emancipation passed by the legislature will not be presumed.

The act of 1820 was plainly intended to restrain emancipation within the state; it was therefore held by the Court of Appeals, that where a testator directed slaves to be sent out of the state and there set free, such bequest was good.

In 1841, the legislature, by a sweeping act, declared, 1st, That any bequest, deed of trust, or conveyance, intended to take effect after the death of the owner, whereby the removal of any slave or slaves without the state is secured or intended, with a view to the emancipation of such slave or slaves, shall be void, and the slave or slaves' assets in the hands of any executor or administrator. 2d, That any gift of any slave or slaves, by deed, or otherwise, accompanied by a trust, secret or implied, that the donee shall remove such slaves from the state to be emancipated, shall be void, and directed the donee to deliver up the slave or slaves, or account to the distributees, or next of kin, for their value. 3d, That any bequest, gift, or conveyance of any slave or slaves, with a trust or confidence, either secret or expressed, that such slave or slaves shall be held in nominal servitude only, shall be void, and the donee is directed to deliver the slave or slaves, or to account for their value to the distributees, or next of kin. 4th, That every devise or bequest to a slave or slaves, or to any person upon a trust or confidence, secret or expressed, for the benefit of any slave or slaves, shall be void.

This act, reversing the whole body of the law, which had been settled by various decisions from 1830, can have no effect on any deed, will, gift, or conveyance, made prior to its passage, 17th December, 1841.

This act, it has been always said, was passed to control a rich gentleman in the disposition of his estate. Like every thing of the kind, he defeated it, and the expectations of his next of kin, by devising his estate to one of his kindred, to the exclusion of all the rest.

My experience as a man, and a judge, leads me to condemn the acts of 1820 and 1841. They ought to be repealed, and the act of 1800 restored. The state has nothing to fear from emancipation, regulated as that law directs it to be. Many a master knows that he has a slave or slaves, for whom he feels it to be his duty to provide. As the law now

stands, that cannot be done. In a slave country the good should be especially rewarded. Who are to judge of this but the master? Give him the power of emancipation, under well regulated guards, and he can dispense the only reward which either he or his slave appreciates. In the present state of the world, it is especially our duty, and that of slave owners, to be just and merciful, and in all things to be *exceptione majori*. With well regulated and mercifully applied slave laws, we have nothing to fear for negro slavery. Fanatics of our own or foreign countries will be in the condition of the viper biting the file. They, not we, will be the sufferers. Let me, however, assure my countrymen, and fellow slaveholders, that unjust laws, or unmerciful management of slaves, fall upon us and our institutions with more withering effect than any thing else. I would see South Carolina the kind mother and mistress of all her people, free and slave. To all, extending justice and mercy. As against our enemies, I would say to her, *Be just and fear not*. Her sons faltered not on a foreign shore; at home, they will die in the last trench, rather than her rights should be invaded or despoiled.

Free negroes, mulattoes and mestizoes, are entitled to all the rights of property, and protection in their persons and property, by action or indictment, which the white inhabitants of the state are entitled to.

Free negroes are *sui generis*. The act of 1832, section 8, requires every male free negro, above the age of fifteen, to have a guardian, who must be a respectable freeholder of the district, (who may be appointed by the clerk.) Notwithstanding this provision, the free negro is still, as I have said, *sui juris*, when of and above the age of twenty-one. The guardian is a mere protector of the negro, and a guarantor of his good conduct to the public.

They may contract and be contracted with. Their marriages with one another, and even with white people, are legal. They may purchase, hold, and transmit by descent, real estate. They can mortgage, alienate, or devise the same. They may sue and be sued, without noticing their respective guardians.

They are entitled to protect their persons by action, indictment, and the writ of habeas corpus, (except that the writ of habeas corpus is denied to those who enter the state contrary to the act of 1835.) They cannot repel force by force—that is, they cannot strike a white man who may strike any of them.

It has, however, been held, in a case decided in the Court of Appeals, and not reported, that insolence on the part of a free negro would not excuse an assault and battery. From that decision I dissented, holding, as in the *State vs. Harden*, 2d Speers, (note,) 155, "That words of impertinence or insolence addressed by a free negro to a white man, would justify an assault and battery." "As

a general rule,⁶ I should say, that whatever, in the opinion of the jury, would induce them, as reasonable men, to strike a free negro, should in all cases be regarded as a legal justification in an indictment."

In addition to the common law remedies, by action of assault and battery and false imprisonment, and indictments for the same, the act of '37 furnishes another guarantee for the protection of free negroes, mulattoes, or mestizoes, by declaring any one convicted of their forcible abduction, or assisting therein, to be liable to a fine not less than \$1,000, and imprisonment not less than twelve months.

Free negroes, mulattoes, and mestizoes cannot be witnesses or jurors in the superior courts. They can be jurors no where. They cannot even be witnesses in inferior courts, with the single exception of a magistrate's and freeholder's court, trying slaves or free negroes, mulattoes or mestizoes, for criminal offenses, and then without oath. This was, however, not always the case, to the entire extent which I have stated. It was at one time held, that any *person of color*, if the issue of a free white woman, is entitled to give evidence, and ought to be admitted as a witness in our courts. This was predicated of a clear mistake of the civil law maxim of *partus sequitur ventrem*, and of the provision in the first section of the act of 1740, that the offspring should follow the condition of the mother, which only mean that slavery or freedom should be the condition of the offspring; but where the words mulatto or mestizo are ever used as designating a class, they are to be interpreted by their common acceptance.

It is singular that the 13th and 14th sections of the act of 1740, directing who may be witnesses against slaves, free negroes, &c., should have been confined to free Indians and slaves, who are to be examined without oath. From which it would seem that free negroes, mulattoes, &c., might be examined in such cases, as at common law, upon oath. But the practice under the act has been uniform, as I have before stated it. I think it a very unwise provision and course of practice, to examine any witnesses, in any court or case, without the sanction of an oath. Negroes (slaves or free) will feel the sanction of an oath with as much force as any of the ignorant classes of white people in a Christian country. They ought, too, to be made to know, if they testify falsely, they are to be punished for it by human laws. The course pursued on the trial of negroes in the abduction and obtaining testimony, leads to none of the certainties of truth. Falsehood is often the result, and innocence is thus often sacrificed on the shrine of prejudice.

Free negroes, mulattoes, and mestizoes may make all necessary affidavits on collateral matters, in cases in the superior courts, in which they may be parties, as on motions of postponement, &c. So, too, they may in such

court take the oaths under the insolvent debtor's or prison bounds' act, and under the acts of Congress to obtain a pension.

Free negroes, mulattoes, and mestizoes (except such as are proved, to the satisfaction of the tax collector, to be incapable of making a livelihood,) are liable to a capitation tax, (fixed by each tax act;) they may make a return personally, or any member of the family may make a return for the rest; or if one be sick, he or she may make such return by agent. They are liable to be double taxed for not making a return of themselves.

This tax seems to have originated in 1806. The act of 1833 directs the issuing of executions against free negroes, mulattoes, and mestizoes, who may fail to pay the tax, and that, under *them*, they may be sold for a term not exceeding one year; provided, however, that they shall in no instance be sold for a longer term than may be necessary to pay the taxes due; but they cannot be sold under the double tax executions to be issued against them for not making returns of themselves. Such executions go against property merely. The constitutionality of the provision for the sale of free negroes in payment of their taxes is exceedingly questionable.

The term "*free person of color*," used in many of our acts, since 1840, has given rise to many imperfect and improper notions. Its meaning is confined by the act of 1740, and all proper constructions of our *code noir*, to *negroes, mulattoes, and mestizoes*. In common parlance it has a much wider signification; hence the danger of its use; for all who have to execute the acts of the Legislature are not *learned lawyers or judges*. The Legislature ought to use the words of the act of 1740, "*free negroes, mulattoes, and mestizoes*," and then every one would have a certain guide to understand the words used.

The act of 1835 declares it to be unlawful for any free negro, or *person of color*, to migrate into this state, or to be brought or introduced within its limits, by land or water.

Any free negro or person of color, not being a seaman on board any vessel arriving in this state, violating this law, shall, and may be seized by any white person, or by the sheriff or constable of the district, and carried before any magistrate of the district, city, or parish, who is authorized to bail or commit the said free negro, and to summon three freeholders, and form a court for the trial and examination of the said free negro, or person of color, within six days after his arrest, and, on conviction, order him to leave the state; and at the time of conviction, to commit him to jail until he can leave the state, or to release him, on bail, not longer than fifteen days. And if, after being bailed and ordered to leave the state, the free negro, or person of color, shall not leave within fifteen days, or having left shall return, shall be arrested, and on com-

viction, before a court of one magistrate and three freeholders, he shall be liable to such corporal punishment as the court shall order; if, after such punishment, the offender shall still remain in the state "longer than the time allowed," (which is, I suppose, the time previously fixed, fifteen days,) or shall return, upon proof and conviction, before a court of one magistrate and three freeholders, the free negro, or person of color, may be sold, and the proceeds appropriated, one half to the use of the state, and the other half to the use of the informer.

If the free negro, or person of color, come into this state, on board any vessel, as a cook, steward, mariner, or in any other employment, the sheriff of the district is to apprehend and confine in jail such free negro, or person of color, until the vessel be hauled off from the wharf, and ready for sea. The act provides, that on the apprehension of any free negro, or person of color, on board any vessel, the sheriff shall cause the captain to enter into a recognizance, with good and sufficient security, in the sum of \$1,000 for each free negro, or person of color, who may be on board his said vessel, that he will comply with the requisitions of this act, which are, that he will, when ready for sea, carry away the said free negro, or person of color, and pay the costs of his detention; but if the captain be unable, or refuse so to do, he is to be required, by the sheriff, to haul his vessel in the stream one hundred yards distance from the shore, and there remain until ready for sea. If this be not complied with in twenty-four hours, the captain is liable to be indicted, and, on conviction, is to be fined not exceeding \$1,000, and imprisoned not exceeding six months.

Whenever any free negro, or person of color, shall be apprehended and committed for coming into this state by sea, it is the duty of the sheriff to call upon some magistrate, to warn the offender never again to enter the state, and, at the time of giving such warning, the magistrate is to enter the name of such free negro, or person of color, in a book, to be kept by the sheriff, with a description of his person and occupation, which book is evidence of the warning, and is to be deposited in the clerk's office, as a public record. If the offender shall not depart the state, in case the captain shall refuse or neglect to carry him or her away, or, having departed, shall ever again enter into the state, he or she is liable to be dealt with, and incur the forfeiture described in the first section.

If any free negro, or person of color, before the passage of the act of 1835, or since, has left, or shall leave the state, they are for ever prohibited from returning, under the penalty of the first section.

The eighth section of the act excepts from its operation free negroes and persons of color coming into the state from shipwreck, but de-

clares them liable to arrest and imprisonment, as provided in the second section, and to incur all its penalties, if, within thirty days, they shall not leave the state.

The ninth section excepts free negroes and persons of color, who shall arrive as cooks, stewards, or mariners, or in any other employment, in any vessel of the United States, or on board any national vessel of the navies of any of the European or other powers in amity with the United States, unless they shall be found on shore, after being warned by the sheriff to keep on board their vessels. The act does not extend to free American Indians, free Moors, or Lascars, or other colored subjects beyond the Cape of Good Hope, who may arrive in any merchant vessel.

Free negroes and *free persons of color* (meaning, of course, mulattoes and mestizoes) are prohibited (unless they have a ticket from their guardian) from carrying any fire-arms or other military or dangerous weapons, under pain of forfeiture, and being whipped, at the discretion of a magistrate and three freeholders. They cannot be employed as pioneers, though they may be subjected to military fatigue duty.

The first, second, third, and fifth sections of the act of 1836, are, to my mind, of so questionable policy, that I should be disposed to repeal them. They carry with them so many elements of discord with our sister states and foreign nations that, unless they were of paramount necessity, which I have never believed, we should at once strike them out. I am afraid, too, there are many grave constitutional objections to them, in whole or in part.

In a previous part of this digest, I have had occasion, incidentally, to state the meaning of the civil law maxim, "*partus sequitur ventrem*," and of the provision of the 1st section of the act of 1740, "the offspring to follow the condition of the mother." Both mean that the offspring of a slave mother must also be a slave.

The maxim, as well as the provision of the act, has a further meaning in relation to property. It determines to whom the issue belongs. The owner of the mother has the same right in her issue, born while she belongs to him, which he has in her. If, for example, the person in possession is tenant for life, then such an one takes an estate for life in the issue. If there be a vested estate, in remainder, or one which takes effect on the termination of the life estate, the remainder man is entitled to the issue, on the falling in of the life estate, as he is entitled to the mother. If there be no estate carved out beyond the life estate, then as the mother reverts so also does the issue.

The estate of a tenant for life in slaves engaged in making a crop, if he die after the first of March, is continued, by the act of '89, until the crop be finished, or until the last

day of December, in the year in which the tenant dies.

The issue of a white woman and a negro is a mulatto, within the meaning of that term, and is subjected to all the disabilities of the degraded caste into which his color thrusts him. The rule "*partus sequitur ventrem*" makes him a free man. The result of mingling the white and negro blood is to make him a mulatto, and that carries with it the disqualifications heretofore pointed out.

The 1st section of the act of 1740 declares slaves to be chattels personal.

The first consequence legally resulting from this provision would have been, without any act of the Legislature, that the stealing of a slave should be a larceny (grand or petit) at common law.

But in 1754 an act was passed, which, by its 1st section, made it a felony, without the benefit of clergy, to inveigle, steal, and carry away, or to hire, aid or counsel any person or persons to inveigle, steal, or carry away, any slave or slaves, or to aid any slave in running away, or departing from his master's or employer's service.

This law, beginning in our colonial times, and made for us by our rulers, given to us by Great Britain, has remained ever since unchanged, and has been sternly enforced as a most valuable safeguard to property. Yet public opinion was gradually inclining to the belief that its provisions were too sanguinary, and that they might be *safely* mitigated, when the torrents of abuse poured upon the state and the judge presiding on the trial from abroad, and the free states of the Union, on account of the conviction of a worthless man, John L. Brown, for aiding a slave to run away and depart from her master's service, *stopped the whole movement of mercy*. It is now, however, due to ourselves that this matter should be taken up, the law changed, and a punishment less than death be assigned for the offense.

Slaves are, in our law, treated as other personal chattels, so far as relates to questions of property or liability to the payment of debts, except that by the county court act (which in this respect is perhaps still of force) slaves are exempted from levy when other property be shown; and also by the act of '87, for recovering fines and forfeited recognizances, the sheriff is directed to sell, under the executions to be issued, every other part of the personal estate before he shall sell any negro or negroes.

In consequence of this slight character which they bear in legal estimation, as compared with real estate, (which has itself, in our state, become of too easy disposition,) slaves are subjected to continual change: they are sold and given by their masters without writing; they are sold by administrators and executors, and by the sheriff, (and may even be sold

by constables.) These public sales by administrators, executors, or the sheriff, may be for payment of debts or partition—they (slaves) are often sold under the order of the Ordinary, without any inquiry, whether it be necessary for payments of debts or division. This continual change of the relation of master and slave, with the consequent rending of family ties among them, has induced me to think, that if by law they were annexed to the freeholds of their owners, and when sold for partition among distributees, tenants in common, joint tenants and coparceners, they should be sold with the freehold, and not otherwise, it might be a wise and wholesome change of the law. Some provision, too, might be made, which would prevent, in a great degree, sales for debts. A debtor's hands and slaves, instead of being sold, might be sequestered until, like *vinum cadum*, they would pay all his debts in execution by the annual profits. If this should be impossible, on account of the amount of the indebtedness, then either court, law or equity, might be empowered to order the sale of the plantation and slaves together or separately—the slaves to be sold in families.

Although slaves, by the act of 1740, are declared to be chattels personal, yet they are also in our law considered as persons with many rights and liabilities, civil and criminal.

The right of protection which would belong to a slave, as a human being, is, by the law of slavery, transferred to the master.

A master may protect the person of his slave from injury, by repelling force with force, or by action, and in some cases by indictment.

Any injury done to the person of his slave, he may redress by action of trespass *vi et armis*, without laying the injury done, with a *per quod servitium amisit*, and this even though he may have hired the slave to another.

By the act of 1821 the murder of a slave is declared to be a felony, without the benefit of clergy; and by the same act, to kill any slave, on sudden heat and passion, subjects the offender, on conviction, to a fine not exceeding \$500, and imprisonment not exceeding six months.

To constitute the murder of a slave, no other ingredients are necessary than such as enter into the offense of murder at common law. So the killing, on sudden heat and passion, is the same as manslaughter, and a finding by the jury, on an indictment for the murder of a slave, of a killing on sudden heat and passion, is good, and subjects the offender to the punishment of the act; or, on an indictment for the murder of a slave, if the verdict be guilty of manslaughter, it is good, and the offender is to receive judgment under the act. An attempt to kill and murder a slave by

shooting at him, was held to be a misdemeanor, and indictable as an assault with an intent to kill and murder. This was a consequence of making it murder to kill a slave.

The act of 1841 makes the *unlawful* whipping or beating of any slave, without sufficient provocation by word or act, a misdemeanor; and subjects the offender, on conviction, to imprisonment not exceeding six months, and a fine not exceeding \$500.

This act has received no judicial construction by our Court of Appeals. It has been several times presented to me on circuit, and I have given it construction. The terms "shall *unlawfully* whip or beat any slave not under his charge," "without reasonable provocation," seem to me convertible. For, if the beating be excusable from reasonable provocation, it cannot be unlawful. So if the beating be either without provocation, or is so enormous that the provocation can be no excuse, then it is unlawful. What is sufficient provocation, by word or deed, is a question for the jury. The question is, whether, as slave owners and reasonable men, if they had been in the place of the defendant, they would have inflicted the whipping or beating which the defendant did! If they answer this question in the affirmative, then the defendant must be acquitted—otherwise, convicted.

The acts of 1821 and 1841 are eminently wise, just and humane. They protect slaves, who dare not raise their own hands in defense, against brutal violence. They teach men, who are wholly irresponsible in property, to keep their hands off the property of other people. They have wiped away a shameful reproach upon us, that we were indifferent to the lives or persons of our slaves. They have had, too, a most happy effect on slaves themselves. They know *now* that the shield of the law is over them; and, thus protected, they yield a more hearty obedience and effective service to their masters.

By the last clause of the 37th section of the act of 1740, it is provided, if any person shall wilfully cut out the tongue, put out the eye, castrate, or cruelly scald, burn, or deprive any slave of any limb or member, or shall inflict any other cruel punishment, other than by whipping, or beating with a horsewhip, cowskin switch, or small stick, or by putting irons on or confining or imprisoning such slave, every such person shall, for every such offense, forfeit the sum of £100, current money, equal to \$61 23-100. This provision, it has been held, extends to any cruel beating of a slave.

The provision is humane, but the punishment is too slight for such scandalous offenses.

To secure convictions under this part of the 37th section, and also where slaves were killed, it was provided in the 39th section, that if a slave suffered in life or limb, or was cruelly beaten or abused, where no white person was present, or, being present, shall neg-

lect or refuse to give evidence, in every such case the owner, or person having the care and management of the slave, and in whose possession of power the slave shall be, shall be adjudged guilty, unless he can make the contrary appear by good and sufficient evidence, or shall, *by his own oath, clear and exculpate himself*. This provision has been considered as applicable to trials under the act of 1821, and the prisoner charged with the murder of a slave has been allowed to exculpate himself.

This is the greatest temptation ever presented to perjury, and the Legislature ought to speedily remove it.

The 38th section of the act of 1740 requires the owners of slaves to provide them with sufficient *clothing, covering and food*, and if they should fail to do so, the owners respectively are declared to be liable to be informed against to the next nearest justice of the peace, (magistrate now,) who is authorized to hear and determine the complaint; and if found to be true, or, in the absence of proof, if the owner will not exculpate himself by his own oath, the magistrate may make such order as will give relief, and may set a fine not exceeding £20, current money, equal to \$13 66-100, on the owner, to be levied by warrant of distress and sale of the offender's goods.

This provision, it must be remarked, (leaving out the exculpatory part,) is a very wise and humane one, *except that the penalty is entirely too slight*. I regret to say, that there is, in such a state as ours, great occasion for the enforcement of such a law, *accompanied by severe penalties*. It might be proper that this matter should, by the direction of an act hereafter to be passed, be given in charge to the grand jury, at each and every term, and they be solemnly enjoined to inquire of all violations of duty on the part of masters, owners, or employers of slaves, in furnishing them with sufficient clothing, covering and food; and the law might also direct, that every one by them reported should be ordered instantly to be indicted.

It is the settled law of this state, that an owner cannot abandon a slave needing either medical treatment, care, food, or raiment. If he does, he will be liable to any one who may furnish the same. In *Fairchild vs. Bell*, that good man and great judge, Wilde, whose early death South Carolina had good cause to deplore, said, in the noble language of a Christian and patriot, "The law would infer a contract against the evidence of the fact, to compel a cruel and capricious individual to discharge that duty, which he ought to have performed voluntarily. For, as the master is bound by the most solemn obligation to protect his slave from suffering, he is bound, by the same obligation, to defray the expenses or services of another to preserve the life of his

slave or to relieve the slave from pain and danger. *The slave lives for his master's service. His time, his labor, his comforts, are all at his master's disposal.* The duty of humane treatment and of medical assistance (when clearly necessary) ought not to be withheld."

By the 22d section of the act of 1740, slaves are protected from labor on the Sabbath day. The violation of the law in this respect subjects the offender to a fine of £5 current money, equal to \$3 7-100, for every slave so worked.

By the 44th section of the same act, owners or other persons having the care and management of slaves, are prohibited from working or putting the said slaves to work for more than fifteen hours, from the 25th March to 25th September, and fourteen hours from 25th September to 25th March, under a penalty of £20 current money, equal to \$13 6-100, for every offense.

The time limited and allowed for labor in this section is too much. Few masters now demand more than twelve hours' labor from 1st March to 1st October, and ten hours from the 1st October to 1st March. This, after allowing suitable intervals for eating and rest, is about as much as humane, prudent masters will demand.

A slave may, by the consent of his master, acquire and hold *personal* property. All, thus acquired, is regarded in law as that of the master's.

The only exception is under the 34th section of the act of 1740, which makes goods acquired by traffic and barter for the particular and peculiar benefit of such slave, boats, canoes, or periaugers, in the possession of a slave, as his own, and for his own use; horses, mares, neat cattle, sheep or goats, kept, raised or bred, for the use of any slave, liable to be seized by any one, and forfeited by the judgment of any justice (magistrate) before whom they may be brought.

Under this section it has been lately held, that no one can enter on the plantation of the master to make such seizure.

A seizure can therefore only be made when a slave is found, as owner, in possession of the contraband articles, outside of his master's plantation.

This qualification may render the law harmless; still, it ought to be repealed. The reasons which led to its enactment have all passed away. It is only resorted to now to gratify the worst passions of our nature. The right of the master to provide as comfortably as he pleases for his slave could not be, and ought not to be abridged in the present state of public opinion. The law may very well compel a master to furnish his slave with proper, necessary, wholesome and abundant raiment and food; but certainly no legislator now would venture to say to a master,

You shall not allow your slave to have a canoe to fish with, or to carry vegetables to market, or that he should not be allowed to have a horse to attend to his duties as a stock-minder in the swamps, savannas and pine forests of the lower part of the state, or that a family of slaves should not have a cow to furnish them with milk, or a hog to make for them meat, beyond their usual allowance. All these are matters between the master and the slave, in which neither the public, nor any prying, meddling, mischievous neighbor, has any thing to do. Experience and observation fully satisfy me that the first law of slavery is that of kindness from the master to the slave. With that properly inculcated, enforced by law and judiciously applied, slavery becomes a family relation, next in its attachments to that of parent and child. It leads to instances of devotion, on the part of the slave, which would do honor to the heroism of Rome herself.* With such feelings on our plantations, what have we to fear from fanaticism? Our slaves would be our sentinels to watch over us—our defenders to protect our firesides from those prowling harpies who preach freedom and steal slaves from their happy homes.

A slave cannot contract and be contracted with. This principle was broadly laid down, by the Constitutional Court, in a case in which a note was given by the defendant to the plaintiff's slave, by name, and the plaintiff brought the action upon it. From this decision Judge Cheeves dissented; upon, I presume, the ground that the master had the right to affirm the contract and make it his own, and consider it for his own benefit. In it, I think, he was right, on the principle that the acquisition of a slave is his master's, and that a slave's contract is like an infant's with an adult. It is not binding on the slave, but if the master affirm it, the defendant cannot be discharged.

A slave cannot, even legally, contract marriage. The marriage of such an one is morally good, but in point of law the union of slave and slave, or slave and free negro, is concubinage *merely*.

The consequence is, that the issue of a marriage between a slave and a free negro are illegitimate, and cannot inherit from father or mother, who may be free.

The hardship of such a case, where the issue of free negroes married to one another

* In 1813, February, Professor Charles Dewar Simmons, on his return to Columbia from Charleston, found the Haugabook swamp entirely over the road. In attempting to cross, on horseback, he was washed off the road and separated from his horse. He first succeeded in reaching a tree, then constructed a raft of rails tied with his comfort. Three times his slave Marcus swam to his rescue. His master told him he could not help him, to save himself; but he persisted until both perished together.

can inherit, might very well lead to a judicious enactment to remedy it.

A slave cannot testify, except as against another slave, free negro, mulatto, or mestizo, and that without oath.

The propriety of this is now so doubtful, that I think the legislature would do well to repeal this provision, and provide that slaves, in all cases against other slaves, free negroes, mulattoes and mestizoes, may be examined on oath.

By the act of 1834, slaves are prohibited to be taught to read or write, under a penalty (if a white person may offend) not exceeding \$100 fine, and six months' imprisonment; if a "free person of color," not exceeding fifty lashes, and a fine of \$50.

This act grew out of a feverish state of excitement, produced by the impudent meddling of persons out of the slave states with their peculiar institutions. That has, however, subsided, and I trust we are now prepared to act the part of wise, humane, and fearless masters, and that this law, and all of kindred character, will be repealed. When we reflect, as *Christians*, how can we justify it, that a slave is not to be permitted to read the Bible? It is in vain to say there is danger in it. The best slaves in the state are those who can and do read the Scriptures. Again, who is it that teach your slaves to read? It generally is done by the children of the owners. Who would tolerate an indictment against his son or daughter for teaching a favorite slave to read? *Such laws look to me as rather cowardly.* It seems as if we were afraid of our slaves. Such a feeling is unworthy of a Carolina master.

The 2d section of the act of 1834 prohibits the employment of a slave, or free person of color, as a clerk or salesman, under a penalty not exceeding \$100 fine, and imprisonment not exceeding six months.

The 1st section of the act of 1800 prohibits the assemblies of slaves, free negroes, mulattoes, or mestizoes, with or without white persons, in a confined or secret place of meeting, or with gates or doors of such place of meeting barred or bolted, so as to prevent the free ingress and egress to and from the same; and magistrates, sheriffs, militia officers and officers of the patrol, are authorized to enter, and if necessary, to break open doors, gates or windows, (if resisted,) and to disperse the slaves, free negroes, mulattoes or mestizoes, found there assembled. And the officers mentioned in the act are authorized to call such force and assistance from the neighborhood as they may deem necessary; and may, if they think necessary, impose corporeal punishment on such slaves, free negroes, mulattoes or mestizoes; and, if within Charleston, they may deliver them to the master of the workhouse, who is required to receive them, and inflict any such punishment as any two

magistrates of the city may award, not exceeding twenty lashes. If out of the city, the slaves, free negroes, mulattoes and mestizoes, found assembled contrary to this act, may be delivered to the nearest constable, who is to convey them to the nearest magistrate, and to inflict, under his order, punishment not exceeding twenty lashes.

The 2d section of the act of 1800, which prohibited meetings for the religious or mental instruction of slaves or free negroes, mulattoes or mestizoes, before the rising of the sun, or after the going down of the same, was very properly altered, by the act of 1803, so as to prohibit the breaking into any place of meeting, wherein the members of any religious society are assembled, before nine o'clock at night, provided a majority are white people. After nine o'clock at night, or before, if the meeting be composed of a majority of negroes, (although white persons may be present,) it may be dispersed by magistrates, sheriffs, militia officers and officers of the patrol, and slaves, free negroes, mulattoes and mestizoes may be punished, not exceeding twenty lashes.

In the case of *Bell vs. Graham*, it was held that these acts could not justify a patrol in intruding on a religious meeting, in the daytime, in an open meeting-house, where there were some white people, although there might be a majority of negroes.

The 2d section of the act of 1800, and the amendatory act of 1803, are treated now as dead letters. Religious meetings of negroes, with only one or more white persons, are permitted by night as well as by day. They ought to be repealed. They operate as a reproach upon us in the mouths of our enemies, in that we do not afford our slaves that free worship of God which he demands for all his people. They, if ever resorted to, are not for doing good, but to gratify hatred, malice, cruelty or tyranny. This was not intended, and ought to have no countenance or support in our statute law.

The 40th section of the act of 1740 regulates the apparel of slaves, (except livery men or boys,) and prohibits them from wearing any thing finer, other, or of greater value, than negro cloth, duffels, kerseys, oenaburges, blue linen, check linen, or coarse garlix, or calicoes, checked cottons or Scotch plaids; and declares all garments of finer and other kind to be liable to seizure by any constable as forfeited.

This section has not, within my knowledge, ever been enforced. Indeed, if enforced now, it would make an immense booty to some hungry, unprincipled seeker of spoils. It ought to be repealed.

The 42d section of the act of 1740 prohibits a slave, or slaves, from renting or hiring any house, room, store or plantation, on his own account. Any person offending against this act, by renting or hiring to a slave, or slaves,

is liable to a fine of £20 currency, equal to \$18 66-100, to be recovered on complaint made to any magistrate, as is directed in the act for the trial of small and mean causes.

The 43d section of the act of 1740, which declares it to be unlawful for more than seven male slaves in company, without some white person accompanying them, to travel together any of the public roads, and, by doing so, makes it lawful for any white person to take them up and punish them by whipping, not exceeding twenty stripes, is, I am afraid, of force, unless it be considered as impliedly repealed by the restriction on the patrol, to whip slaves found out of their owner's plantation without a ticket in writing.

The occasion for such a law has passed away. Public opinion has considered it unnecessary; and, like every useless severity, mercy has condemned it. It would be well that it should be repealed.

The act of 1819, 5th section, repeals the 23d section of the act of 1740. The law now makes it unlawful for any slave, except in the company and presence of some white person, to carry or make use of any fire-arms, or other offensive weapon, without a ticket or license, in writing, from his owner or overseer; or unless such slave be employed to hunt and kill game, mischievous birds or beasts of prey, within the limits of his master's plantation, or unless such slave shall be a watchman in and over his owner's fields and plantation. If this law be violated, any white person finding a slave carrying or using a gun, or other offensive weapon, without a ticket or license, in writing, from his owner or overseer, or not used to hunt game, &c., within the plantation, or as a watchman in the same, may seize and appropriate to his own use such gun or offensive weapon. But to make the forfeiture complete and legal, the party making the seizure must, within forty-eight hours after the seizure, go before the next magistrate and make oath of the manner of taking; and then, after forty-eight hours' notice to the owner or overseer having charge of the slave, by summons to show cause why the articles should not be condemned, (the service of the summons being proved on oath,) the magistrate may, by certificate, under his hand and seal, (if he be satisfied that the arms have been seized according to the act of 1819,) declare the same to be forfeited.

The 6th section of the act of 1822 declares it to be unlawful to hire to male slaves their own time; and if this law be violated, the slaves are declared liable to seizure and forfeiture, according to the provisions of the act in the case of slaves coming into this state.

Whether this provision relates to the 4th section of the act of 1816, 7 stat 453, or to the 5th section of the act of 1808, 7 stat. 450, is indeed somewhat uncertain. The act of 1816, and all its provisions, were repealed by

the act of 1818, 7 stat. 458. The act of 1808 seems to be unrepealed, and hence, therefore, I presume the proceeding to forfeit must be under it. By it, the proceeding is to be in the name of the state, in the nature of an action of detinue.

The latter part of the 36th section of the act of 1740 declares, that any master or overseer who shall permit or suffer his or their negro, or other slave or slaves, at any time, to beat drums, blow horns, or use any other loud instruments, or whosoever shall suffer and countenance any public meeting or feasting of strange negroes or slaves on their plantation, shall forfeit £10, current money, equal to \$6 88-100, upon conviction or proof, provided information or suit be commenced within one month.

This provision is one so utterly unnecessary, that the sooner it is expunged from the statute book the better. Indeed, it is not only unnecessary, but it is one under which most masters will be liable, whether they will or not. Who can keep his slaves from blowing horns or using other loud instruments?

The 2d section of the act of 1803 prohibits the importation of any negro, mulatto, mestizo, or other person of color, bond or free, from the Bahama, West India Islands, or South America, and also from other parts, of all of those persons who have been resident in any of the French West India Islands.

The 3d section provides that no male slave above the age of fifteen years shall be brought into this state from any of our sister states, unless the person importing such negro shall produce and file in the office of the clerk of the district where the person so importing may reside, a certificate under the hands of two magistrates, and the seal of the court of the district where the slave so imported resided for the last twelve months previous to the date of the certificate, that he is of good character, and has not been concerned in any insurrection or rebellion.

Under the 5th section, if slaves be brought into this state, in violation of the provisions of the 2d and 3d sections, they are declared to be forfeited, one half to the state, the other half to the informer; to be recovered in the name of the state, by action in the nature of an action of detinue, in which it is not necessary to prove that the defendant was in possession at the commencement of the suit, and the informer is a competent witness.

The 3d section of this act has been so often violated, that it could hardly be enforced at present without great injustice. Still, the provision is a wise one. No greater curse has ever been inflicted on South Carolina, than the pouring upon her of the criminal slaves of our sister states. It might be well for the legislature, in revising (which I hope they will speedily do) our *Code Noir*, to re-enact this provision.

The act of 1835 makes it unlawful to bring into this state originally, or to bring back into this state after being carried out of it, any slave from any port or place in the West Indies, or Mexico, or any part of South America, or from Europe, or from any sister state, situated to the north of the Potomac river or city of Washington, under the penalty of \$1,000 for each slave, to be recovered in an action of debt, and forfeiture of the slave.

This provision does not extend to runaway slaves.

By the act of 1847, any slave carried out of this state in the capacity of steward, cook, fireman, engineer, pilot, or mariner, on board any steamer, or other vessel trading with any port or place in the Island of Cuba, may be brought back into this state, if he may not in his absence have visited some other port or place in the West Indies other than the Island of Cuba, or a port or place in Europe, Mexico, South America, or any state north of the river Potomac and city of Washington.

The 7th section of the act of 1835, providing for the condemnation and forfeiture of a slave by a court of a magistrate and freeholders, was declared by the whole Court of Errors, in the State vs. Simmons et al., to be unconstitutional. How the forfeiture declared in the 6th section is to be carried out, is somewhat doubtful. I suppose it might be a part of the judgment on the indictment and conviction of the owner for bringing back a slave, which he had carried to the prohibited places. The whole provision had better be repealed. Slaves visiting free states find nothing to enslave them of negro freedom *there*; in general, after all the *labors of love* of our negro-loving brethren of the free states, they, in general, return to their southern homes better slaves. Forfeitures, too, may occur under this act, which none of us would bear. Every servant, (negro, mulatto, or mestizo) who has been in Mexico during the war, and who has returned, is liable to be forfeited, and his master to pay a fine of \$1,000. Could the law be enforced in such a case? We have nothing to fear, if the whole act of 1835 be repealed. It ought to be, for no law should stand which public opinion, in many cases, would not suffer to be enforced. Indeed, there are few, very few cases, where the act of 1835 could meet with public favor. I speak unreservedly, for I am talking to friends, slaveholders—citizens of a state whom I love, and whom I would have to be “without fear and without reproach.”

CRIMES OF FREE NEGROES, MULATTOS, MESTIZOS, AND SLAVES—THEIR PUNISHMENT AND MODE OF TRIAL, INCLUDING THE LAW AS TO RUNAWAYS AND THE PATROL.—The general rule is, that whatever would be a crime at common law, or by statute, in a white person, is also a crime of the same degree in a free

negro, mulatto, mestizo, or slave. In some instances the punishment has been altered, in others new offenses have been created. There are also cases in which the slave or free negro, mulatto, or mestizo, from his status, would be guilty of a higher crime than a white person would be under the same circumstances. These will be tried to be fully noticed in this digest. Whenever a slave commits a crime by the command and coercion of the master, mistress, owner, employer, or overseer, it is regarded as the crime of the master, mistress, owner, employer, or overseer; and the slave is not criminally answerable.

A free negro, mulatto, or mestizo cannot lawfully strike any white person, even if he be first stricken, and, therefore, if he commit homicide of a white person, generally, he cannot be guilty of manslaughter; he is either guilty of murder, or altogether excused. I suppose if one without authority to govern or control a free negro, mulatto, or mestizo, were in the act of endangering life or limb of the free negro, mulatto, or mestizo, and he, to defend himself and save life or limb, were to slay his assailant, it *might* be excusable. A free negro, mulatto, mestizo, or slave, slaying one of the same *status*, would be guilty of murder, manslaughter, or be excused *se defendendo*, as in the case of white people, at common law.

The 17th section of the act of 1740 declares a slave who shall be guilty of homicide of any sort upon any white person, except it be *by misadventure*, or in defense of his master, or other person under whose care and government such slave shall be, shall, upon conviction, suffer death.

This seems to conflict, in some degree, with what is said, 3d chap., 1st section. Still, I think what is affirmed *there*, is law. A homicide committed by the command and coercion of the master is not one of which the slave is guilty, but the master alone is guilty of it.

By the 24th section of the act of 1740 it is provided, if a slave shall grievously wound, maim, or bruise any white person, unless it be by the command, and in the defense, of the person or property of the owner, or other person having the care or government of such slave, such slave, on conviction, shall suffer death.

The 18th section of the act of 1751 (which, having altered the act of 1740, is by the act of 1783 continuing the act of 1740, continued, instead of the parts altered) gives to the courts trying any negro or other slave, for any offense under the acts of 1740, or 1751, where any favorable circumstances appear, the power to mitigate the punishment by law directed to be inflicted.

The meaning of the words grievously wound, maim, or bruise, has never received any precise adjudication. In the case of the

State vs. Nicholas, a portion of the court indicated their opinion to be, that to grievously wound, maim, or bruise, meant such an injury as might endanger life or limb. This is, I think, the true meaning. The subject, before 1848, passed under my review, in the unfortunate case, in York, which led to the passage of the act of 1843. In that case, the lady on whose body the outrage was attempted was seriously bruised, yet so as in no way to endanger life. I thought, and so decided, that the slave was not guilty of a capital felony.

By the act of 1843, any slave or *free person of color* (meaning any free negro, mulatto, or mestizo) who shall commit an assault and battery on a white woman, with intent to commit a rape, shall, on conviction, suffer death, without the benefit of clergy.

The 24th section of the act of 1740 declares any slave who shall strike any person, unless it be by the command and in defense of the person and property of the master, or other person having the care and government of such slave, for the first and second offense, liable to such punishment as the court may think fit, not extending to life or limb, and, for the third offense, to the punishment of death. Under the 4th section, and this of the 8d chapter, it ought to be remarked, that *that portion of the 24th section of the act of 1740 which exempts a slave from punishment for acting in obedience to his master, and in his defense, requires more to make out his exemption than the act intended.* For it not only requires that the striking, wounding, maiming, and bruising should be under the command of the master, but also in defense of his person or property. Either the command of the owner or other person having the care or government of the slave, the defense of his person or property, should be enough. *The law ought to be so amended.* Any slave, seeing a white man about to knock his master down, or in the act of stealing his property, ought not to wait for a command—his blow in defense, under such circumstances, is good and ought to be lawful.

The 16th section of the act of 1740 provides that any slave, free negro, mulatto, Indian, or mestizo, who shall *wilfully and maliciously* burn or destroy any stack of rice, corn, or other grain, of the produce, growth, or manufacture of this state; or shall wilfully and maliciously set fire to, burn, or destroy any tar kiln, barrels of pitch, tar, turpentine, or resin, or any other goods or commodities, the growth, produce, or manufacture of this state; or shall feloniously steal, take, or carry away any slave, being the property of another, *with intent to carry such slave out of the state*; or shall wilfully and maliciously poison, or administer any poison to any person, freeman, woman, servant, or slave, shall suffer death. Over these and all other offenses, for which, under the act of 1740, death may

be the punishment, the court, under the 18th section of the act of 1751, mentioned in the 5th section of the 8d chapter of this digest, have the power of mitigating the punishment. The term Indian, used in this 16th section of the act of 1740, means either a freed Indian, (one who was once a slave), or an Indian not in amity with this government. (See 8d section of 1st chap.) In the case of the *State vs. White and Sadler*, it was held that the act of 1754, making it a felony without clergy to inveigle, steal, or carry away any slave, applied to slaves as well as to free people, and hence, therefore, that it repeals that provision of the act of 1740 which made it capital, on the part of a slave, "to steal, take, or carry away any slave, the property of another, *with intent to carry such slave out of the state.*" I think the decision is very questionable. For in 1783 the act of 1740 was continued as law, without noticing this supposed repeal of 1754. If the act of 1754, in this respect, and not the act of 1740, is to govern slaves, then every slave aiding another in running away is liable to be hanged. This certainly is rather a hard consequence.

By the 17th section of the act of 1740, and the 14th section of the act of 1751, amending the same, any slave who shall raise or attempt to raise an insurrection, or shall delude and entice any slave to run away and leave this state, and shall have actually prepared provisions, arms, ammunition, horse or horses, or any boat, canoe, or other vessel, whereby the guilty intention is manifested, is liable, on conviction, to be hanged, unless the court, from favorable circumstances, should mitigate the sentence, or, from several being concerned, should be disposed to select some, on whom they would inflict other corporal punishment.

A slave who shall harbor, conceal, or entertain any slave that shall run away, or shall be charged or accused with any criminal matter, shall suffer such corporal punishment, not extending to life or limb, as the court may direct.

A free negro, mulatto, or mestizo, who, in 29th section of the act of 1740, was liable to a penalty for harboring a slave, is, by the act of 1821, (which operates as an implied repeal,) if he or she harbor, conceal, or entertain any fugitive or runaway slave, liable on conviction to such corporal punishment, not extending to life or limb, as the court may in their discretion think fit.

The 30th section of the act of 1740 prohibits any slave residing in Charleston from buying, selling, dealing, trafficking, bartering, exchanging, or using commerce, for any goods, wares, provisions, grain, victuals of any sort or kind whatsoever, (except slaves who, with a ticket in writing from their owner or employer, may buy or sell fruit, fish, and garden stuff, or may be employed as porters, carters, or fishermen, or may purchase any thing for the use of

their masters, owners, or other person who may have the care and government of such slaves, in open market.) All goods, wares, provisions, grain, victuals, or commodities, in which such traffic by slaves is carried on, are liable to be seized and forfeited, and may be sued for and recovered before any magistrate of Charleston, one half to the informer, the other half to the poor of the parish of St. Philip's, and the magistrate by whom the forfeiture is adjudged, is authorized to inflict corporal punishment on the slave engaged in such traffic, not exceeding twenty stripes. The 31st section prohibits any slave belonging to Charleston from buying any thing to sell again, or from selling any thing on their own account in Charleston. All goods, wares, and merchandise, purchased or sold in contravention of this section, are liable to be forfeited by the judgment of any magistrate of Charleston, one half to the use of the poor, the other half to the informer.

If any slave (without the command of his or her master, mistress, or overseer, evidenced by a ticket in writing) shall shoot or kill, between the first of January and the last day of July in each year, any fawn (deer)—or any buck, (deer,) between the first of September and last day of October, and between the first day of March and last day of April, such slave, upon conviction before a magistrate, by the oath of a sufficient witness, or the confession of the said slave, shall, by order of the magistrate, receive twenty lashes on the bare back, unless security be given for the payment within one month of the fine imposed by the act on white or free persons, £2 proclamation money, equal to \$8 44-100, for each fawn or buck killed. If the slave shall kill a doe, between the first day of March and the first of September, without the consent and privity of the owner or overseer, such slave is liable, on conviction before a magistrate and four freeholders, (sworn according to the 4th section,) to receive thirty-nine lashes on the bare back.

A slave detected in fire hunting, or who shall kill in the night-time any deer, horse, or neat cattle, or stock of any kind, not the property of his master or owner, without the privity or consent of the owner or overseer of the said slave, such slave, on conviction before a court of one magistrate and four freeholders, sworn to the best of their judgment, without partiality, favor, or affection, to try the cause now depending between the state, plaintiff, and B., the slave of C., defendant, and a true verdict given, according to evidence, is liable to receive thirty-nine lashes on the bare back.

Any slave, who, not in the presence and by the direction of some white person, shall mark or brand any horse, mare, gelding, colt, filly, ass, mule, bull, cow, steer, ox, calf, sheep, goat, or hog, is liable to be whipped not exceeding fifty lashes, by the order of any magistrate before whom the offense shall be proved by the evidence of any white person or slave.

The act of 1834 authorizes the court, before which a slave or free person of color is convicted of any offense, not capital, to punish the offender by imprisonment, provided this act shall not abolish the punishments which were then by law imposed. Under this act, the question will arise, whether the punishment by imprisonment is cumulative; or whether, when resorted to, it is in place of the other punishment to which the offender is liable. I incline to the opinion, that the punishment is not cumulative, but may be substituted for other punishment, at the discretion of the court.

A slave guilty of insolence to a white person, may be tried by a court of a magistrate and freeholders, and punished at their discretion, not extending to life or limb.

"No free person of color," (meaning, I suppose, "no free negro, mulatto, or mestizo,") or slave, can keep, use, or employ a still or other vessel, on his own account, for the distillation of spirituous liquors, or be employed or concerned in vending spirituous liquors of any kind or description, and on conviction thereof, is regarded as guilty of a misdemeanor and is to be punished not exceeding fifty lashes at the discretion of the court; and the still or other vessel is forfeited, and the same is to be sold under an execution to be issued by the magistrate granting the warrant to apprehend the free negro or slave, and the proceeds of the sale are directed to be paid to the commissioners of the poor.

A slave or free person of color (meaning as is above suggested) who shall commit a trespass, which would subject a white person to a civil action, and for which no other penalty is prescribed, is regarded as guilty of a misdemeanor, and is to be punished at the discretion of the court trying him, not extending to life or limb. A question will arise, under this act, whether any civil remedy by way of trespass can now be had against any negro, mulatto, or mestizo, for a trespass by him or her committed.

A free negro, mulatto, mestizo, or slave, being a distiller, vender or retailer of spirituous liquors, who shall sell, exchange, give, or otherwise deliver spirituous liquors to a slave, except upon the written and express order of the owner, or person having the care of the slave, shall, upon conviction, (if a slave,) be whipped not exceeding fifty lashes; if a free negro, mulatto, or mestizo, be also whipped, not exceeding fifty lashes, and fined not exceeding \$50; one half of the fine to the informer, the other half to the state.

A slave, or free person of color, (meaning as before suggested,) convicted of a capital offense, is to be punished by hanging; if convicted of an offense not capital, a slave is to be punished by whipping, confinement in the stocks, or treadmill, or, as is prescribed by the act of '34, (see ante 1st sec.) imprisonment

may be resorted to. A free negro, mulatto, or mestizo, is liable to the same punishment, or may be fined.

In all parts of the state, (except in Charleston,) slaves or free persons of color (meaning as suggested ante 19th sec.) are to be tried for all offenses by a magistrate, and five freeholders; the freeholders are to be obtained by the magistrate who issues the warrant, summoning eight neighboring freeholders, out of whom the prisoner, (if he be a free negro, mulatto or mestizo,) or the owner or overseer, (if a slave,) may select five to sit upon the trial, and upon good cause shown against any freeholder, to be determined by the magistrate, another shall be substituted in his place. If the prisoner, the owner, or overseer, should refuse or neglect to make the selection of the five freeholders to sit, the magistrate may himself make the selection.

In Charleston, (including the parishes of St. Philip's and St. Michael's,) slaves, free negroes, mulattoes and mestizoes, are liable to be tried for capital offenses by two judicial magistrates and five freeholders, or slaveholders, who, I suppose, ought to be obtained as directed—ante 22d section—and in such cases there must be a concurrence of all of the freeholders, and one of the magistrates; in cases not capital, they are to be tried by two judicial magistrates and three freeholders or slaveholders, a concurrence of a majority of the jurors and the presiding magistrate is enough for conviction; if the jurors be unanimous, then in that case the concurrence of the magistrate is dispensed with. In all cases, the ministerial magistrate issuing the warrant is to attend the court, and act as prosecuting officer.

The anomaly is presented *here* of two different systems of jurisprudence for the state and Charleston. Both cannot be right; one should give way to the other.

The jurors when organized should be sworn by the magistrate, to well and truly try the case now pending before you, and adjudge the same according to evidence. So help you God.

A slave, free negro, mulatto or mestizo, charged with a criminal offense, is to be tried within six days, if it be practicable to give at least one day's notice of the time and place of trial to the free negro, mulatto, mestizo, the owner, overseer, or other person having the care and government of the slave—which notice must, in all cases, be fairly given before the trial can proceed.

On the trial of a slave, free negro, mulatto or mestizo, it is the duty of the magistrate to state in writing, plainly and distinctly, the offense charged against the prisoner, and for which he is on trial; to this charge the prisoner ought to be required to answer, either by himself, or through his guardian, master, owner, overseer, or other person having the

care and government of such slave on trial, or by the attorney employed to defend such prisoner. In every such trial, the prisoner is entitled to the benefit of the services of an attorney at law, to defend him. The magistrate is bound to keep a correct statement of the testimony given against and for the prisoner, and to annex it to the charge, (the accusation.) The judgment of the court in the country districts and parishes must be in writing, and signed by the magistrate and any four of the freeholders, or by the whole, if they agree. In Charleston, it must be made up as directed, (ante sec. 23,) and must be signed by those required to concur in it. It is in all parts of the state to be returned to the clerk's office of each judicial district, and be there filed.

When a slave, free negro, mulatto or mestizo, is capitally convicted, an application may be made to any of the judges of the courts of law of this state, in open court, or at chambers, for a new trial. The magistrate presiding is required, for such purpose, to furnish a full report of the trial; and if from that, as well as from affidavits on the part of the prisoner, (which before being laid before the judge must be shown to the magistrate presiding,) the judge should be satisfied the conviction is erroneous, a new trial is to be ordered, on which neither the magistrate, nor magistrates, nor any of the freeholders, who before sat on the case, are to sit again. To afford opportunity for this appeal to be made, or for an application to the governor for a pardon, time, reasonable time, must be allowed by the court between the conviction and the execution of the sentence.

Under these provisions, there is not any very well settled practice. Before a motion for new trial ought to be heard, reasonable notice of the time and place of such motion should be given to the magistrate presiding. When a new trial is ordered, I have always directed the clerk of the court to summon the magistrate and freeholders, who should try the case *de novo*, and to give notice to all concerned of the time and place of trial, and, if necessary, to issue summons for the witnesses. This seemed to secure, in the best way I could devise, consistently with the law, an impartial administration of it.

The right of appeal, in cases not capital, and to afford sufficient time in such cases for an application for pardon, ought to be provided for. For many are the errors and abuses of power committed in this behalf. The whippings inflicted by the sentence of courts trying slaves and free negroes are most enormous, utterly disproportioned to offenses, and should be prevented by all the means in our power. In all cases where whipping is to be resorted to, I would limit the punishment by law, in all cases affecting both black and white, to forty save one, and direct it to be

inflicted in portions, and at considerable intervals of time. Thus mingling imprisonment and whipping together, and holding the rod suspended, in the contemplation of the party, until the delay itself would be worse punishment than the infliction.

The tribunal for the trial of slaves and free negroes (a magistrate and freeholders of the vicinage) is the worst system which could be devised. The consequence is, that the passions and prejudices of the neighborhood, arising from a recent offense, enter into the trial, and often lead to the condemnation of the innocent. The Charleston scheme is better than that which prevails in the country. Still I think it none of the best. I would establish a tribunal to consist of one judicial magistrate, to be appointed by the legislature, to try all criminal cases against free negroes, mulattoes, mestizos or slaves. He should be compelled to hold his court on the first Wednesday in every month, at the court house; and he should have the power to direct a constable (whom he should be authorized to appoint to attend his courts) to summon twenty-four freeholders or slaveholders of the district, and out of them a jury of twelve should be impanelled to try the prisoner, allowing him as far as ten, a peremptory challenge, and, on cause shown, to the balance of the panel. The magistrate issuing the warrant should be required to state the offense and act as prosecuting officer. To the charge thus presented, the prisoner should be required to answer; and he should have the benefit of an attorney's services, to defend him on the law and evidence. The judicial magistrate should be required to charge the jury on the law and the facts, as judges of the law courts now do. The jury should simply say, guilty or not guilty. The magistrate presiding should pronounce the judgment of the law. The prisoner on conviction should have the right of appeal to the Court of Appeals, and no sentence should be passed until the case was there heard, and the prisoner remanded for judgment. The judicial magistrate, his constable, and the magistrate issuing the warrant, should be compensated by fees, to be paid in all cases by the state.

Under the law, as it now stands, the state is liable for all the costs attending negro trials, (except free negroes, mulattoes and mestizos, in the parishes of St. Philip's and St. Michael's, who, if convicted, and able to pay, are declared liable to pay the same; and also, under the 21st section of the act of 1740, if the prosecution against a slave, free negro, mulatto, or mestizo, appears to be malicious, the court trying the case, and satisfied of that fact, may order and compel the prosecutor to pay the costs.) This provision of the 21st section of the act of 1740 is re-enacted, as to slaves, in the magistrates' and constables' act for St. Philip's and St. Michael's, passed in 1829.

A slave cannot be twice tried and punished for the same offense.

If a slave be out of the house or plantation where such slave resides, or without some white person in company, and should refuse to submit to and undergo the examination of any white person, it is lawful for such white person to pursue, apprehend and moderately correct such slave, and if such slave shall assault and strike such white person, *such slave may be lawfully killed*.

Masters, overseers, or other persons, have the power to apprehend and take up any slave found out of his or her master's or owner's plantation at any time, but more especially on Saturday nights or Sundays, or other holidays, not being on lawful business, or not with a ticket from the master, or not having some white person in company, and even with a ticket, if armed with wooden swords or other mischievous and dangerous weapons, and to disarm such slave, and all such mentioned in this section to whip.

Any person is authorized to take up any runaway slave, and it seems, it is now the duty of the person taking up a runaway (when he knows or can be informed without difficulty to whom such slave belongs) to send such slave to the said owner; but if the owner be unknown, then, in Charleston district, it is the duty of the person taking up such runaway slave to send, within five days, the same to the workhouse in the city of Charleston; the master of the workhouse is to admit every such slave upon a certificate from a magistrate of the district, or mayor, or one of the aldermen of the city, containing the particulars of the apprehension of such fugitive slave, and requiring his confinement; in all other parts of the state the runaway slave is to be sent to the jail of the district. It is the duty of the master, jailor or sheriff, to securely keep the slave so committed, and if the same escape by negligence, the master or sheriff (for the jailor is merely the sheriff's keeper) is liable to the owner for the value of the slave, or such damage as may be sustained by such escape. Information of the slave so committed to the care of the master of the workhouse, is to be by him sent to the owner, if known; if he be unknown, the master of the workhouse is to advertise such slave in the city paper, (under the advice of the city attorney,) giving the name, age, and further description, so that the owner may be informed the slave is in custody. In other parts of the state, the runaway is to be advertised once a week for three months, in some public gazette, by the sheriff or jailor, who is also required, if the owner's name and address can be obtained, to give him specific notice of the confinement of the said runaway. The ad-

vertisement must contain the name, age, and other particular description of such slave, and the name of the person said to be the owner. The jailor or sheriff, and the master of the workhouse, is liable to a fine of 10s. or \$2 14 for such slave committed as a runaway, neglected to be advertised. The runaway is to be kept for twelve months, if not claimed by the owner, and in Charleston, proof of property made on oath before one of the judges of the Common Pleas, or any magistrate, within twelve months from the date of the advertisement in Charleston, in other parts of the state, from the commitment, the runaway is to be sold. In Charleston the sale is to be made by city sheriff, he giving one month's notice of the time, place, and reason of such sale; he is to give to the purchaser a receipt for the money arising from such sale, specifying the reasons of the sale, and he (the city sheriff) is directed to pay the said proceeds to the city treasury. Out of the fund so paid over is to be deducted the expenses of the said runaway, as provided and allowed by law. The balance is to be retained by the city treasurer, for the owner, but if not claimed within a year and a day, it is to be paid into the state treasury, and out of it, I presume, the commissioners of public buildings of Charleston district are entitled to draw it, under the general law of '89. In other parts of the state, the sheriff of the district is to advertise the runaway for a month, and then to sell; and after paying the charges or expenses allowed by law, the balance is to be paid to the commissioners of public buildings, and is to belong to them absolutely, if not claimed by the owner of the slave so runaway within two years. The title to be executed by the sheriff to the purchaser of such runaway, is good, and bars the rights of the owner. Any neglect or default in the duties required by the 58d section of the act of '89, subjects a jailor or sheriff to an action on the case.

A person taking up a runaway, and failing to send the same to the workhouse or the district jail within five days, is liable to pay 20s. or \$4 28 for every day the same may be retained. The person taking up a runaway is entitled to 10s., or \$2 14 for taking up such runaway, 4d. or 7 cts. for every mile from the place where taken to the owner's residence, (if the runaway be carried to the owner,) or to the district jail or the workhouse, and half a dollar per day for the travel, computing the journey at twenty-five miles to the day. To entitle the person taking up a runaway to these allowances, he must carry the slave to a neighboring magistrate, who may examine on oath the captor, touching the time and distance he has necessarily travelled, and shall go with such slave, and the said magistrate shall give a certificate, on a just estimate of such time and distance, and on presenting such certificate,

the jailor is to give his note for the same, payable to the bearer. The master of the workhouse is to pay the same, instead of giving a note. These fees are to be paid to the jailor, or master of the workhouse, by the owner, or out of the sale of the said runaway, if he should not be claimed by the owner and be sold.

It is the duty of the master of the workhouse, jailor, or sheriff, to provide sufficient food, drink, clothing, and covering, for every runaway slave delivered into the custody of either. The jailor or sheriff is entitled to charge twenty cents per day for each runaway confined, and also for all necessary expenses in providing clothes or blankets. In the workhouse a runaway slave is directed to be put to labor on the treadmill, and therefore no charge for diet is made.

Each militia beat company, by its commander, (except the company or companies on Charleston neck,) is divided into convenient patrol districts. All the free white male inhabitants, above the age of eighteen years, of each patrol district, are liable to do patrol duty, except aliens or transient persons above the age of forty-five years, or who have not resided within the state for six months, or persons who are above the age of forty-five, who do not own slaves, or alien enemies. Persons liable to do patrol duty may send in their places, respectively, an able-bodied white man, between the ages of sixteen and sixty, as a substitute; and for failing to discharge the patrol duty, in person or by substitute, each person liable to do the same, without a legal excuse, is liable to pay a fine of \$2 for each default, and ten per cent. on his general tax of the preceding year.

It is the duty of the commanding officer of each beat company to make out a roll of the inhabitants of each patrol division liable to do patrol duty, and from such roll, at each regular muster of his company, to prick off, at his discretion, any number of persons to do patrol duty until the next muster, and appoint *some prudent and discreet person* to command the said patrol. If the officer commanding the beat company fails to prick off, at each muster, the patrol of each division, or the commandant of the patrol fails in his duty, each of them is liable to a fine not exceeding \$30.

It is the duty of the commandant of the patrol to call them out at least once a fortnight, and to take up and correct with stripes, not exceeding twenty, with a switch or cow-skin, all slaves found outside of their owner's or employer's plantation, without a ticket or letter to show the reasonableness of his absence, or some white person in company to give an account of the business of such slaves; and also, if the slave have a ticket, and has in his possession a gun, pistol, or other offensive weapon, unless such slave be on lawful business, or in company with some white person not less than ten years of age. Fire-arms and other

offensive weapons, found by the patrol in the possession of a slave, in violation of the above provisions, are liable to seizure by them, and condemnation and forfeiture to the use of the regiment to which the patrol may belong. To obtain such forfeiture, the leader of the patrol making the seizure must, within ten days, go before the nearest magistrate, and make oath of the manner, time and place of taking; and if the magistrate shall be satisfied of the legality of the seizure, he shall summon the owner of the slave from whom the arms have been taken to appear before him, within ten days, to show cause why the arms should not be condemned. If the owner should fail to appear, or, appearing, should show insufficient cause, the said arms or weapons shall, by certificate under the hand of the magistrate, be "declared condemned," and may be sold within ten days, and the proceeds, after payment of the costs, paid to the paymaster of the regiment.

The patrol have the power, and are required to enter into any disorderly house, vessel, or boat, suspected of harboring, trafficking, or dealing with negroes, whether the same be occupied by white persons, free negroes, mulattoes, mestizoes, or slaves; and to apprehend and correct all slaves found there, by whipping, (unless, as I apprehend, such slaves shall not only have a ticket to be absent, but also a ticket to trade.) The patrol is required to inform a magistrate of such white persons, free negroes, mulattoes, or mestizoes, as may be found in such house, vessel, or boat, and to detain, until recovered by law, such produce or articles for trafficking as may be therein found, if such detention be authorized by any three freeholders, or any magistrate. It is the duty of the owner of each boat or vessel navigating the public rivers or canals of this state, to keep and produce to the magistrates or patrols, when required, a list of all the negroes composing the crew, with their owners' names, and a description of their persons.

The patrol may, as is stated in the 44th and 45th sections of chapter 2d of this digest, break up unlawful assemblies of slaves, and inflict punishment on slaves there found, not exceeding twenty stripes, with a switch or cowskin.

Every owner of a settled plantation, who does not live on the same six months in every year, and who employs upon the same fifteen or more slaves, is required to keep upon the same some white man capable of performing patrol duty, under a penalty of fifty cents per month, for each and every working slave employed on the said plantation.

Patrols are not liable, in the discharge of their duty, to the payment of any tolls.

In incorporated towns and villages, the power and duty of regulating the patrol in the same, is vested in and devolved upon the municipal authorities of the same.

The captain of a beat company cannot constitute himself the captain of a patrol.

The ticket or pass to a slave need not state the place to which he or she is to go, and a patrol whipping a slave, with such a pass, are trespassers. The form given in the act of 1740, "Permit this slave to be absent from the plantation of A. B. until——," or any other equivalent form, will be sufficient.

It is the duty of captains or commanders of patrol to keep their respective commands in good order and demeanor when on duty; and any patrol man misbehaving himself, or neglecting or disobeying the orders of his commandant, is liable to a fine of not less than \$2, nor more than \$20. If the captain of a patrol acts disorderly, so as to defeat the proper execution of the patrol laws, he is liable to be returned by any member of his command, or any other person competent to give evidence, to the commanding officer of the beat company, who is to return him to a court martial for trial, and, if found guilty, he may be fined not less than \$5, nor more than \$50.

Each captain of the patrol is required, at the next regular muster of the beat company after his appointment, to make a return, on oath, of the performance of his duties. Failing to make such a return, he is liable to a fine of \$20.

The penalties to be incurred by the commanding officers of beat companies, commandants of the patrols, and patrol men, for neglect of duty, or violation of law, may be imposed by courts martial.

If the patrol be sued, and the party suing fail to recover, he is liable to treble costs; which is full costs, to which is added one half, and then half of that half.

The act of '39, in repealing all other laws on the subject of the patrol, *unfortunately* excepts the act regulating the performance of patrol duty on Charleston neck. The act of '23, so saved from repeal, differs in many respects from the general law, which it is now necessary to state. 1st. A majority of the company officers is to direct how the company is to be divided into patrol districts, and the captain is so to divide it, and it is so to continue until altered by a majority of said officers. The officers failing to do this duty, are liable to a fine of \$30, to be recovered in the court of law, (by indictment,) as no mode is appointed by the act. 2d. All white males above eighteen and under sixty, residing in said patrol districts, (except ministers of the gospel,) all females owning ten slaves above the age of ten years, and *all persons* having settled farms or a house and lot, with five or more slaves above the age of sixteen, residing within the said companies, are liable to do patrol duty. Females required to do patrol duty, must, of course, do so by substitute. 3d. The commanding officer or officers of a company are to appoint, in writing, the leader of the pa-

trol, whose qualification and term of office is the same as pointed out in section 40. The person so appointed refusing to accept, the commanding officer or officers of companies or the leaders of patrol not performing the duties required, are liable to a fine of \$20, to be recovered by indictment in the court of law, and paid to the commissioners of cross roads. No person can be compelled to serve as leader more than once in twelve months. 4th. The patrol is not only authorized to enter disorderly houses, &c., as stated in section 42, but, if resisted, they are authorized to break open doors, windows, and locks; they are required to produce to the magistrate, whom they may inform of white persons, free negroes, mulattoes, and mestizoes, found in houses, the produce or articles for trafficking found there, to be disposed of according to law. 5th. The leader of a patrol is, as is stated in section 49, to keep his command in good order, &c.; any patrol man misbehaving, &c., is liable to a fine of \$2, to be imposed by the officers of the company to which he belongs, and to be paid to the commissioners of cross roads, Charleston neck. A leader acting disorderly may be proceeded against as stated in section 49; he is to be tried by a court consisting of the officers of his company, or any three officers of the regiment, and may be fined \$10, to be paid to the same authorities, commissioners of cross roads, Charleston neck. 6th. A substitute for patrol must be between eighteen and sixty. 7th. Free negroes, mulattoes, or mestizoes found on Charleston neck, are to be treated by the patrol as slaves, unless they produce their free papers, office copies, or other satisfactory evidence of freedom. If found out of their own houses, or the inclosure of their employer, not having a regular ticket from their guardian, after 9 P. M., from 20th September to 20th March, and 10 P. M., from 20th March to 20th September, they are declared liable to be treated as slaves without a pass. 8th. No grocery, retail shop, or any store, shop, or place, wherein are vended spirituous liquors, is to be kept open on the Sabbath day, or any other day after 9 P. M., from 20th September to 20th March, and after 10 P. M., from 20th March to 20th September; any owner or occupant violating this law, or trading, trafficking, or bartering therein, with any slaves, free negroes, mulattoes, or mestizoes, is liable to a fine of \$50, to be recovered by indictment in the court of law, and paid to the commissioners of cross roads, Charleston neck. 9th. Each inhabitant of Charleston neck, liable to patrol duty, is required to provide and carry with him on service a good gun or pistol in order, with at least six ball cartridges for the same, or cutlass, under the penalty of \$2, and ten per cent. on his general tax of the year preceding. 10th. The commanding officer of the company or companies on Charleston neck may appoint a secretary, whose duty it

shall be to prepare and lay before the military courts herein before mentioned all necessary papers, and to keep a record of the proceedings of the same, which is to be open to the inspection of all interested. For this duty he is exempted from patrol duty. 11th. The leader of each patrol may appoint a warmer to summon the patrol; and for this duty he is exempted from the patrol. 12th. It is the duty of the officers commanding the companies on Charleston neck, and all magistrates, to inform the leaders of the patrols of unlawful assemblies of negroes, (slaves,) free negroes, mulattoes, and mestizoes. The leaders on receipt of this information are to turn out their patrols, and discharge the duty required by law; failing to do this, they are respectively liable to a fine of \$20, to be paid to the commissioners of cross roads, Charleston neck. For uniformity sake, I think this act of '28 should be repealed.

The commissioners of cross roads on Charleston neck, by the act of '45, were authorized to build a guard-house, and it provides that all free negroes, mulattoes, mestizoes and slaves, on Charleston neck, charged or found guilty of violating the law, shall be therein confined and there punished; and also slaves, free negroes, mulattoes and mestizoes, taken up by the patrol, shall there be whipped according to the patrol law, unless the owner or person having charge of such slaves, free negroes, mulattoes or mestizoes, or their guardians, shall pay to the commissioners of cross roads one dollar for each of said slaves, free negroes, mulattoes or mestizoes.

THE RIGHTS, CIVIL AND CRIMINAL REMEDIES, AND LIABILITIES OF THE MASTER. ALSO, THE LAW TO PREVENT THE DISTURBANCE OF THE PEACE IN RELATION TO SLAVES AND FREE NEGROES.—The right of a master in a slave, and all which appertains or belongs to him, is that of property. If the slave be in the possession of another, his owner may maintain detinue for his specific delivery, or may have a bill in equity, to compel his possession to be restored, (unless he may have been bought for sale, in which case the owner is left to his remedy at law,) or may bring trover to recover the damages sustained in his conversion. The owner may bring trespass for any forcible taking of the slave from his possession, or for any forcible injury done to his person. So, too, if a slave wander from the possession of the owner, and another employ him, the owner may bring assumpsit for his labor, or trover for the time he may be in the employment of a third person, or if such person *knew he was a slave*, the action on the case might be sustained. So, too, if a bailee abuse or employ a slave differently from the contract of bailment, and he is killed or injured, the bailee would be liable to the owner. So, too, a common carrier transporting a slave from one place to another, is liable for an injury to, the death, or

loss of the slave, as he would be for other articles, with this exception, if he shows that he used proper care and diligence, and the injury, loss, or death resulted from the act of the slave, then he would not be liable. Any employment of a slave without the consent of the master, by which the slave is killed or injured, makes the person so employing him liable for the damages sustained by the owner. For personal property in the possession of the slave, and commonly called the property of the slave, the master may maintain the same actions against one possessing himself of it, as he could for the slave himself. For harboring a runaway slave, knowing him to be such, an action on the case can be maintained by the owner.

A contract for the hire of a slave for a year is an entire contract; yet if the slave die, his wages will be apportioned. But if the slave be sick, or run away, no deduction is to be made on either account. The owner is not liable, generally, for medical services rendered to his slave while in the possession of one to whom he may be hired. The master is liable for medical services rendered to his slave without his knowledge, if the slave be in great danger.

By the 5th section of the act of '39, provision is made, if any white man shall beat or abuse any slave, quietly and peaceably being on his master's plantation, or found any where without the same, with a lawful ticket, that he shall forfeit \$50, to be recovered by and to the use of the owner, by action of debt, besides being liable to the owner, in action of trespass for damages. Under this provision, it has been held, that where a slave was found out of his master's plantation, but had a ticket, and was whipped by the party finding him, that the master could maintain the action under the act, and recover.

The act of '23, for the regulation of patrol duty on Charleston neck, section 4, provides if any white man shall *wantonly* beat or abuse any slave, quietly and peaceably being in his or her owner's inclosure, or found any where without the same, with a lawful ticket, he shall forfeit fifty dollars, to be recovered by the owner, and to his use, besides being liable to the owner in an action of trespass for damages. This provision is identical with that of '39, except that, in the act of '23, the beating or abusing must be *wantonly*. In the act of '39 no such word is used. It may be, under the act of '23, malice or cruelty would have to be shown.

The third section of the act of 1747 provides, that if any overseer or manager shall employ, upon his own account or business, any of the negroes committed to his care, by sending them on errands, or in any other manner whatever, such overseer or manager shall pay the sum of 10s. (equal to \$2 14) for every day he or they shall so employ any negro com-

mitted to the care of such overseer or manager. (This penalty, another part of the act, section 1st, directs to be recovered before a justice of the peace, magistrate now, in the manner and form prescribed for the recovery of small debts and damages.) The 3d section further provides that, to establish the fact of the employment of the owner's slaves by the overseer or manager, *the information of the negroes shall be sufficient, unless the overseer or manager will exculpate himself on oath.*

In the case of Dillard *vs.* Wallace, I ruled that this provision was obsolete from non-user. The Court of Appeals, admitting that its enforcement had been hitherto unknown—and ninety years had then elapsed from its enactment—held that it was still not obsolete. It is, therefore, a law, however anomalous in its provision about evidence, still to be enforced.

If any slave shall be beat, bruised, maimed or disabled, in the lawful business or service of his master, owner, overseer, or other person having charge of such slave, by any person or persons not having sufficient cause or authority, (of which cause the magistrate trying the case is to judge,) he or they shall forfeit 40s. current money, equal to 5s. 8d. sterling, or \$1 20, to the use of the poor of the district or parish. If the slave or slaves be maimed, or disabled from performing his or her or their work, the person or persons beating the slave shall also forfeit and pay to the owner 15s. current money, equal to about 44 cents, for every day he may be unable to discharge his usual service, and the charge of the cure of such slave. If the damages in the whole do not exceed £20 current money, equal to \$12 27, they, as also the penalty for the use of the poor, may be recovered before a magistrate; and if the offender shall produce no goods, on which the same may be levied, the magistrate is authorized to commit him to jail until the same be paid.

These provisions have been very little noticed, and furnish so poor a relief for the abuse to which they apply, that they will rarely be resorted to. The action of trespass is an abundantly better remedy. Still, this law exists, and may, in the case described in the act, be resorted to by owners, if they choose so to do. They cannot, however, have this remedy and also an action of trespass.

Any person who shall give a ticket or written permit to a slave, the property of, or under the charge of, another, (without the consent, or against the will of such owner, or person having charge,) authorizing such slave to be absent, or to deal, trade or traffic, such person is liable to be indicted, and, on conviction, to be punished by fine not exceeding \$1,000, and imprisonment not exceeding twelve months.

Notwithstanding this act, a person who might give a ticket to a slave, with a view to aid a

slave in running away, and departing from his master's service, might be tried and capitally convicted under the act of 1764.

If a white person *harbor, conceal, or entertain* any runaway or fugitive slave, he or she is liable to be indicted for a misdemeanor, or prosecuted in a civil action for damages, at the election of the owner or person injured. If indicted and convicted, the offender is liable to a fine not exceeding \$1,000, and imprisonment not exceeding twelve months. The owner may proceed by indictment, and also civilly, at the same time; he cannot be put to his election until the trial.

If a person be maimed, wounded, or disabled, in pursuing, apprehending, or taking any slave that is run away, or charged with any criminal offense, or in doing any thing else, in obedience to the act of 1740, he shall receive such reward from the public as the General Assembly may think fit; and if he be killed, his heirs, executors, or administrators shall receive the same.

I do not know that any claim has ever been made under this law. Still, however, it seems to be of force, and a claimant would be entitled to the benefit of its provisions.

The court trying and capitally convicting a slave is to appraise the same, not exceeding \$200, and certify such appraisement to the treasurer of the division within which the slave may be condemned; and, in the event of the slave being executed in pursuance of the sentence, the treasurer is directed to pay the appraisement to the owner.

If a white person game with a free negro, mulatto or mestizo, or slave, or shall bet upon any game played, wherein one of the parties is a free negro, mulatto, mestizo or slave, or shall be willingly present, aiding and abetting, where any game of chance is played as aforesaid, in such case, such white person, upon conviction by indictment, is liable to receive thirty-nine lashes, and to be fined and imprisoned at the discretion of the court; one half of the fine is to go to the informer, the other half to the state.

Any shop-keeper, trader, or person, by himself or any other person acting for him or her, who shall buy or purchase from any slave, in any part of this state, any corn, rice, peas or other grain, bacon, flour, tobacco, indigo, cotton, blades, hay, or any other article whatever, or shall otherwise deal, trade, or traffic, with any slave not having a permit so to deal, trade, or traffic, or to sell any such article, from or under the hand of his master or owner, or such other person as may have the care and management of such slave, upon conviction, is liable to be fined, not exceeding \$1,000, and to be imprisoned not more than twelve months nor less than one month. It is the business of the party trading with the slave to produce and prove the permit.

If a slave enter a shop, store, or house of

any kind used for dealing, trading and traffick-ing, with an article, and come out without the same, or enter without an article, and come out with one, it is sufficient evidence to convict the owner or person occupying the same for trade, in an indictment under the act of 1817.

If a white person, being a distiller, vender or retailer of spirituous liquors, shall sell, exchange, give, or in any otherwise deliver any spirituous liquors to any slave, except upon the written and express order of the owner or person having the care and management of the slave, he shall, upon conviction, be fined not exceeding \$100, and imprisoned not exceeding six months; one half of the said fine to the use of the informer, and the other half to the use of the state.

One effect resulting from the act, and certainly neither intended nor anticipated by the legislature, was to repeal the penalty of the act of 1817, quoad distillers, venders and retailers, (the very persons who, above all others, ought to bear the heaviest penalties,) in relation to the sale or exchange of spirituous liquors. The rule of evidence established by the act of 1817, as to the production and proof of the permit, still remains in force.

In an indictment for trading with a slave, or giving or delivering spirituous liquors to a slave, it is necessary that the slave should be described, when possible, by his own and his owner's name, or, if that be not possible, by some equivalent description of the slave.

In indictments under the act of 1834, although the rule of evidence established by its 5th section does not apply, and so, too, under the act of 1817, where the trading is not in a "shop, store, or house of any kind, used for trading," yet if the slave be seen to enter with an article, and come out without it, or to enter without an article and come out with one, it is a fact from which, at common law, a presumption may arise of guilt, and on which the jury may convict.

It was decided, immediately after the passage of the act of 1817, that the sale to a slave of *any article whatsoever*, or purchase from a slave of *any article whatsoever*, belonging to the slave, his master or any other person, was a violation of the law.

If the master or overseer, or other person having charge of the slave, send a slave with goods to detect another in dealing, trading or trafficking with a slave, and stand by and see the trading, it does not excuse the defendant—he still is guilty.

If the owner or overseer or other person having charge of the slave, go with him to make the sale or purchase, and stand by and assent to the same, the vender would not be guilty. For then the trading might be regarded as that of the master by his slave.

If the trader be in the habit of trading with slaves, and had authorized his clerk so to trade,

he may be convicted for a trading with a slave by his clerk in his absence. But the principal cannot be criminally answerable for the act of his clerk, unless done with his knowledge and consent, actual or complied. The same rule holds as to a partner.

An overseer trading with his employer's slaves may be indicted and convicted under the act of 1817.

Before the act of '34, a person who sold liquor to a slave might be indicted for trading with a slave without a ticket, and also for retailing. It follows, since the act of '34 is substituted for that of '17, so far as the penalty is concerned, that a person now may be indicted for selling, giving, exchanging or delivering spirituous liquors to a slave, and for retailing without a license, although there be but one sale and delivery.

If one sell spirituous liquor to a slave, or to another for him, without a permit from his owner, employer, or other person having charge of him, and the slave die in consequence of the too free use of the liquor so sold, the person so selling is liable, in an action on the case, for the value of the slave to the owner.

A license to retail cannot be granted to an applicant, unless he will swear that he will not, during his license, sell, give, exchange, barter, or otherwise deliver, spirituous liquors to any slave, contrary to the law on that subject. If he has been engaged before in the business, he must also swear that he has not, during his past license, sold, given, delivered, exchanged, bartered, or otherwise delivered, spirituous liquors to a slave contrary to law.

If a master, or other person having charge of a slave who may be accused of any capital or other crime, shall conceal or convey away such slave, so that he cannot be brought to trial and punishment, such master or other person shall be liable to forfeit £250 current money, equal to \$35 16s. 5d., or \$153 58, if the crime be capital; if not capital, then the forfeiture is £50 currency, equal to £7 3s. 3d., or \$30 70. This provision, in capital felonies, supersedes the common law offense of accessory after the fact in a crime committed by a slave, so far as owners and other persons having charge of a slave may be concerned.

A master is liable for the acts of his slave done negligently, unskillfully or wilfully, in the course of any public employment or business carried on by him, under the authority or with the consent of his master. *As where* a slave navigating his master's vessel, so negligently managed his craft as to injure a wharf or to run down a car of fish; or, where a slave carpenter, with his master's assent, actual or implied, undertakes to repair a house, and in doing it, does it so *unskillfully* that the whole building falls down; or, where a slave blacksmith, in shoeing a horse, becomes enraged with him, and *wilfully* knocks out the horse's

eye with his shoeing hammer—in all these cases, the master is liable, according to the principles which I have above stated.

The master is not liable for the unauthorized acts of his slave, done without his knowledge or consent, actual or implied, and not in any public business or employment, in which he has placed his slave.

Any person or persons who shall, on his, her or their own behalf, or under color or in virtue of any commission or authority from any state or public authority of any state in this Union, or any foreign power, come within this state, with the intent to disturb, hinder or counteract the operation of laws, made or to be made, in relation to slaves, free negroes, mulattoes and mestizoes, are liable to be arrested, and, if not bailed, committed to jail by any of the judges of this state, including the recorder, for a high misdemeanor; and, on conviction, is liable to be sentenced to banishment from the state, and to be fined and imprisoned at the discretion of the court.

Any person within this state, who shall, at any time, accept any commission or authority from any state, or public authority of any state in this Union, or from any foreign power, in relation to slaves or free persons of color, and who shall commit any overt act, with an intent to disturb the peace or security of this state, or with intent to disturb, counteract or hinder the laws of this state, made or to be made, in relation to slaves or free negroes, mulattoes or mestizoes, shall be deemed guilty of a misdemeanor, and, upon conviction thereof, shall be sentenced to pay, for the first offense, a fine not exceeding \$1,000, and to be imprisoned not exceeding one year; and, for the second offense, he shall be imprisoned seven years, and pay a fine not less than \$1,000, or be banished from the state, as the court shall see fit.

The governor's duty is, to require all persons who come into this state, for the purposes, and under the circumstances, stated in the first section of the act of '44, and the preceding 29th section of this digest, to depart from the state in forty-eight hours after such notice; and such persons shall thereupon be bound to depart; and, failing to do so, they are guilty of a high misdemeanor, and, upon conviction, are to be sentenced to be banished from the state, and to such fine and imprisonment as the court may think expedient.

Any person convicted a second or any subsequent time, under the first and third sections of the act of '44, set out in the preceding 29th and 31st sections of this digest, is to be imprisoned not less than seven years, to pay a fine not less than \$1,000, and to be banished from the state.

It is the duty of the sheriff of the district to execute the sentence of banishment, by sending the offender out of the state; and if he shall return, (unless by unavoidable acci-

dent,) the sheriff of the district where he may be found is "to hold" him in close confinement, under the original sentence, until he shall enter into a recognizance to leave the state never to return.

Free negroes, mulattoes and mestizoes, entering this state as cook, steward or mariner, or in any other employment, on board any vessel, in violation of the provisions of the 2d section of the act of '35, and which is set out and prescribed in the 59th section of chapter 1 of this digest, and who may be apprehended and confined by the sheriff, are not entitled to the writ of habeas corpus.

If the sheriff shall, by the usual posse comitatus and the civil authorities, not be able to enforce the provisions of the act of '35, the governor, on a requisition made on him and signed by the sheriff, is required to order out a sufficient number of the militia to meet the exigency of the case, to be placed under the command of discreet officers, who shall be ordered to give the sheriff the aid necessary to execute the said act.

NEGRO POPULATION OF THE SOUTH WITH REFERENCE TO LIFE STATISTICS.—I now, in compliance with your request, give you a few remarks on the value of life among the colored population, which is becoming a very important subject for consideration. My time is much occupied with yellow fever, and I might very fairly claim indulgence for the hasty and imperfect manner in which I am performing my task; but I may, with still more propriety, offer as an excuse a deficiency of material, from the universal neglect of VITAL STATISTICS in the United States. We have already seen that there is by no means a redundancy of information as regards the whites; but the neglect, north and south, of statistics of blacks, is positively disreputable in this enlightened epoch.

Though there is a want of data, by which we can fix with accuracy the value of life among the colored population, there are still sufficient to show that insurance companies are going into this branch of their business pell-mell, without knowing any thing of the probabilities. If I can bring them to a halt, and give a better direction to this part of the investigation, it is all I can now hope.

No one can be more fully alive than myself to the vast importance of insurance on negroes, to the south; yet, though I may be severely censured by some, I shall express myself freely, without regard to the opinions of others, as I believe the truth alone can be beneficial on the whole. If risks on this class were taken alone by joint-stock companies, formed of heavy capitalists who were disposed to gamble on the chances, I should have no objection to see a course of experiments which might lead to a discovery of the true value

of life among the colored population; but it should not be forgotten that the life insurance companies now preferred are the *Mutual*, and that unless all the risks work well, the interest of every individual must be jeopardized, as *all* are stockholders under this system. Suppose, for example, 1,000 lives are insured in a mutual company, one half whites, the other colored. If the risks upon the latter are badly selected, upon whom would fall the losses? Not upon the owners of the slaves alone, or rich members of the company, but upon the poor, honest, industrious, and, I may add, unsuspicious man, who at the end of the year scrapes together a few of his hard-earned dollars to invest in an insurance company, with the hope of saving his wife and children from beggary when he is no longer able to toil for them.

The data given in my former paper go strongly to prove that the acclimated population of our southern sea-ports are *taxed too high* for life insurance, and I hope I shall at least gain credit for honesty of intention, if I now express my doubts whether we are *taxed enough* on the colored population.

The general fact that there is less mortality south than north among the colored class is sufficiently established; but there are no statistics by which the chances of life can be calculated with sufficient accuracy to form the basis of insurance operations in any city in the Union. At the south, vital statistics have been so neglected by local authorities, that, with the exception of Charleston, South Carolina, we are left wholly in the dark, and even here there has been a great deficiency of details. Within the last year or two, however, important improvements have been made in the manner of keeping tables of mortality in Charleston and Mobile, and we may in a few years expect important results.

Though the white and black races stand diametrically opposed to each other as to the influence of climate on health and longevity, and the necessity for so doing is manifest, yet in most cities no attention has been paid to separating the two classes in their bills of mortality. Even in the large cities of the north, the bills of mortality are so badly kept, or so concealed from the public, that nothing can be ascertained on this point. I have made repeated but fruitless efforts to procure bills of mortality of the colored population from Baltimore, New-York, and Boston. I have, however, been fortunate enough, through the kindness of Dr. G. Emerson, (who has taken the trouble to ransack the records for me,) to procure the bills of Philadelphia for 20 years.

I am really at a loss how to account for the silence of Boston on this subject. The statistics of that city, embracing every thing which the statesman, physician, or philanthropist could ask, as births, marriages, deaths, sexes, occupations, ages, diseases, manufactures, &c.,

Sec. are all given with admirable system and detail annually, and yet no allusion whatever is made to the mortality of the colored. I have before me the census for each year since 1840, and the last of them, viz. for 1845, is accompanied by a long and able report by Dr. Shattuck on vital statistics, making altogether an octavo volume of 300 pages, and yet not a fact can be found bearing on our subject. Can it be that the mortality of the colored population is concealed on account of its connection with the question of abolition? When I see the intelligence with which these statistics have been conceived and executed—when I see that these details were once carefully kept, and then of late years abandoned—and when I reflect on the improbability of the importance of such facts being overlooked in a city like Boston, I cannot help indulging such a suspicion.

I have on a former occasion, in the *Southern Quarterly Review*, discussed at some length the question of the unity of the races, and shall not here open that question again; but no one at all familiar with the past history of the negro and his present peculiarities, can entertain a doubt that he is now very widely separated, both in *physique* and *morale*, from the white man, and that it would require a combination of circumstances not likely to occur, and a long series of years, to bring him up to the Caucasian standard.

The extreme antiquity of Egypt as a civilized nation, taught by Champollion, Young, Vyse, Birch, and others, has not only been confirmed by the recent important discoveries of Baron Bunsen and Lepsius, but these gentlemen have fixed beyond dispute the epoch of Menes, the first king of Egypt, at more than 3,600 years before Christ. It is equally well settled by the monumental history of that country, that the negroes existed at that early day with all the physical characteristics they now possess, and that they were treated and spoken of as slaves and barbarians. No one familiar with this discussion will question these statements, and I think we may conclude that if the negro has never, in the course of 5,000 years, been thrown into a position to develop his equality, we have no right to expect any great advance in the next few hundred years. The good old Bishop of Blois, (H. Grégoire,) in his work on the "Literature of Negroes" after exhausting the history of the past, has only been able to collect a few examples who had attained a certain degree of proficiency in the literature of the whites; but not one of them can bear comparison with the better specimens of the Caucasian race; and all attempts made in the present century at bettering the condition of the slaves have but added to their ignorance and unhappiness.

But, passing by the physical history of the negro in the old world, I shall confine myself to the influence of climate as exhibited in this

country over this race, so far as it is connected with the subject of life insurance.

All testimony combines to establish the fact, that cold climates are most unfavorable to the health and longevity of the blacks; and as some of our readers may not be familiar with vital statistics, I will precede those of the colored class by tables, showing the mortality among the whites in various parts of the world, which may serve for comparison. The deaths, from recent and authentic tables, were as follows:

STATISTICS OF MORTALITY—AVERAGE FOR ONE YEAR.

Boston.....	1 in 47
Philadelphia.....	1 in 42
England.....	1 in 45
France.....	1 in 42
Austria.....	1 in 33
Prussia.....	1 in 38
Russia.....	1 in 38
London.....	1 in 37
Birmingham.....	1 in 36
Sheffield.....	1 in 32
Leeds.....	1 in 37
Bristol.....	1 in 32
Manchester.....	1 in 29
Liverpool.....	1 in 28

I have not been able to get any tables from the towns in Canada, showing the mortality of the negroes. Rankin, in his "Visit to Sierra Leone," informs us, that the negroes who deserted their masters during the revolutionary war, and joined the British army, were afterward colonized in Nova Scotia, but finding it impossible to stand the climate, they were removed to the colony in Africa by the British government. They there, in their state of liberty, showed their constitutional indolence and improvidence, and most of them have had the good fortune to be kidnapped and sold back to the United States. If I recollect correctly, Rankin states, that of 1,100 taken to Sierra Leone, but about 600 of them and their descendants remained at the end of thirty years.

As before stated, I have been unable to procure from Boston and New-York tables exhibiting the mortality of the negroes for late years, but I have so often seen it stated at 1 in 15, and 1 in 18 respectively, that I presume these figures may be assumed as substantially correct.*

Philadelphia may be placed intermediate in point of climate between the extremes of heat and cold in the United States, and we should accordingly expect to find here an intermediate mortality in this class. The tables below (furnished me by Dr. G. Emerson,) when placed beside those of Charleston and Boston,

* If there is any one who has information to the contrary, we would gladly welcome the facts.—Ed.

will confirm such a result. As the climate on the gulf approaches still more closely that of the tropic, it is not improbable that the longevity of the blacks is still greater (as it certainly is of mulattoes) here, than in the city of Charleston. The tables of mortality for Charleston and Philadelphia are as follows:

MORTALITY OF CHARLESTON.

Years.	Whites.	Blacks.
1830.....	1 in 39.4	40.0
1831.....	1 in 46.6	37.9
1832.....	1 in 51.9	55.3
1833.....	1 in 55.0	55.7
1834.....	1 in 42.1	44.1 Y. Fever.
1835.....	1 in 43.1	46.4 "
1836.....	1 in 40.6	19.6 Cholera.
1837.....	1 in 47.3	46.7
1838.....	1 in 18.3	33.0 Y. Fever.
1839.....	1 in 29.9	39.0 "
1840.....	1 in 50.7	46.6
1841.....	1 in 65.1	44.3
1842.....	1 in 50.3	47.8
1843.....	1 in 60.8	32.9
1844.....	1 in 69.3	43.3
1845.....	1 in 52.9	48.5

MORTALITY OF PHILADELPHIA.

Years.	Whites.	Blacks.
1821.....	1 in 18.9	1 in 18.9
1822.....	1 in 21.5	1 in 21.5
1823.....	1 in 17.5	1 in 17.5
1824.....	1 in 17.5	1 in 17.5
1825.....	1 in 27.0	1 in 27.0
1826.....	1 in 26.1	1 in 26.1
1827.....	1 in 18.9	1 in 18.9
1828.....	1 in 20.8	1 in 20.8
1829.....	1 in 23.7	1 in 23.7
1830.....	1 in 27.2	1 in 27.2

Years.	Whites.	Blacks.
1831.....	1 in 39.6	33.6
1832.....	1 in 28.8	22.6
1833.....	1 in 47.3	35.2
1834.....	1 in 41.4	33.3
1835.....	1 in 38.3	31.2
1836.....	1 in 43.8	21.4
1837.....	1 in 45.1	32.7
1838.....	1 in 45.0	29.2
1839.....	1 in 49.4	31.3
1840.....	1 in 52.9	38.6

It appears from the above tables, that the average mortality in Philadelphia, among the colored population, was 1 in 26, and in Charleston, 1 in 44. Certainly a very marked contrast, and there can be no doubt that, could the free colored be separated from the slaves, the latter in Charleston would show a still more favorable result.* There is a con-

siderable number of mulattoes and free colored in Charleston. The mortality in Philadelphia has been decreasing among both whites and colored, no doubt from the improved condition of the city.

I have marked above the years in which yellow fever prevailed in Charleston, and it will be seen that the mortality in those years among the negroes was lower than among the whites, on account of their exemption from this disease. In my former article I gave evidence of the fact that the mortality from this disease falls on the *unacclimated whites*.

I have given in the above tables the mortality of whites and blacks together, in each city, in order to contrast the influence of climate on the races. The greatest mortality ever known in Charleston in the colored class, was in 1836, when it was raised by the cholera to 1 in 19, more than double the average; but even cholera and slavery combined here are far less destructive to the negro than liberty and climate in Boston, where the mortality is said to average 1 in 15.

To arrive at a fair estimate of the mortality of this class in northern and southern cities, we must take into consideration, not only the influence of climate, but social condition also. The negro is by nature indolent and improvident, every where and under all climates; and has no where in a state of freedom shown a high degree of longevity, or prolificacy, though by nature the longest lived, I believe, of all the human family. These facts should not be overlooked in estimating their mortality at the north, where they are enjoying all the abstract delights of liberty. In the West Indies, we have a strong illustration of the effect of emancipation, and in their native state, in Africa, the average longevity of the blacks (as in all barbarous nations) will be less than among our slaves. In our northern states, where they to a great extent fail to provide against the severe winters, the diseases arising from cold and want must add much to their misery and mortality.

History cannot point to any epoch or spot on the earth where the condition of the negro race, either physical or moral, has been at all comparable with that of the slaves of the United States. Mr. Lyell, who seems to have reflected much and honestly on the evils of slavery, during his last visit to this country, expressed to me decidedly his conviction that the negroes could only be civilized through slavery. They are here brought into forced contact with a civilized race, from whom they imbibe new and more enlarged ideas; they

44; free blacks, 1 in 32; slaves, 1 in 77-8. This result is probably attributable to two causes—1st, there is a large proportion of mulattoes among the free colored; 2d, the physical wants of the slaves are better supplied, and they are infinitely more cheerful and happy than the free colored.

* We have the authority of Dr. Wilson, then a citizen of New-York, (now of Paris,) in a pamphlet published by him in 1827, for giving the mortality of Baltimore in 1823-24-25, as follows:—Whites, 1 in

are taught a rational religion; many learn to read and write; all are taught the agricultural or mechanic arts, or some other useful employment; they not only become more intellectual, but improve in physical appearance; and if they are capable of civilization at all, they are thus admirably prepared for a further advance. Their progress has certainly been infinitely more rapid than it could have been under any missionary or colonial system. Mr. Lyell thinks, from all this, that they may be brought up to the Caucasian standard; but if he will live among them as I have, and study well their history, from the palmy days of Egypt down, he will find abundant reason to change this opinion. The races of men, like animals in a wild, uncultivated state, may, if decile, be tamed, educated and vastly improved; but there are limits set to each by nature, beyond which no advance can be made. Although there may be an occasional example where a negro will show a degree of intelligence and capacity for improvement beyond the mass, yet no negro has ever left behind him any intellectual effort worthy of being preserved. The negro is naturally mild and docile; the Indian, on the contrary, is an untamable, carnivorous animal, which is fading away before civilization, in spite of the efforts of missionaries. Can any one who knows any thing about the present condition of the Indians and their past history, propose a scheme for their improvement, which would offer the least prospect of success? The race must soon be extinct; even the pure blood Mexicans, who, I have no question, are a different race from the aboriginal savage, are going down in darkness to their long home.*

The negro will reach, I may say *has* reached, his highest degree of civilization, and emancipation has so far only proved what I think is inevitable, that when removed from compulsion he relapses into barbarism. The Indian can be made to do nothing "on compulsion"—he would rather die than be a slave.

When a race (as the negroes) has had possession of a continent for at least 5,000 years, and no monument stands to designate a single civilized spot; when we see that it held constant intercourse with Egypt in her glory; when, too, we see the result, of all recent experiments of abolitionists, I think we may safely conclude that the negro attains his greatest perfection, physical and moral, and also his greatest longevity, in a state of slavery. The single fact of the longevity of the colored class in Charleston is a very signifi-

cant one, and should be pondered on by the philanthropist. The colored population of this city show not only a lower ratio of mortality than any laboring class of any country, but a lower mortality than the aggregate population (including nobility and all) of any country in Europe, except England, with which it is about on a par, and would surpass even England were the slaves taken separate from the free colored. The mortality of the aggregate colored population of Charleston now is less than that of the aggregate of any *town* in Europe.

That the negro, even when placed under the most favorable circumstances as to physical wants, &c., is unfavorably affected by cold climates, is a fact which admits of no dispute. All the hospital practitioners of the northern cities must acknowledge the fact. So sensitive are they to cold, and so little are they affected by that fell destroyer of the white race, *malaria*, which kills more than war and famine, that they suffer in the southern states more from diseases of winter than those of summer. They are, I am informed, exempt from the violent congestive fevers of our interior districts, and other violent forms of marsh fever; and so exempt are they from yellow fever, that I am now attending my first case of this disease in a full-blooded negro. In fact, it would seem that the negro blood is an antidote against yellow fever, for the smallest admixture of it with the white will protect against this disease, even though the subject come from a healthy northern latitude in the midst of an epidemic. There are some exceptions, but they are rare. I will not fatigue the reader by an elaborate comparison of the diseases of the two races, as influenced by climate, but will allude to a single one—consumption.

In Charleston they have but recently commenced separating the white and colored population in their bills of mortality, with full details, and I have the deaths from consumption in the latter class for but one year, viz., 1846; but the ratio of deaths from this disease is so uniform, that it fluctuates but little when undisturbed by epidemic diseases. In Charleston, the deaths from consumption in 1846 were 1 in 7 of all the deaths; and in Mobile the average for the three years, 1844-'45-'46, the ratio was 1 in 8 in the colored population.

The following extract is from the New-York Medical and Surgical Reporter, February 27, 1847:

"Colored Home.—The report of the resident physician, James D. Fitch, M. D., for the year ending 1st January, 1847, is just published. By the tabular account of the inmates during that time, which specifies the sex, age, history and diseases of all who have come under the supervision of Dr. Fitch, we find that the total number in charge during the year was

* The Peruvian and Mexican, the most civilized races found in America, had smaller heads than the savage tribes. How did their heads get smaller by cultivating their intellects, if they are the same race with the latter? This is a question I should like to see solved.

464, and the number of deaths 89.
The disease most prominent is consumption, by which more than one half of the deaths have been caused, the number being 47." &c.

Now, how near this astounding mortality from consumption may be to the general result of other years in New-York and Boston, I have not the data to determine. I can only say that I have no disposition to plead one side; but, on the contrary, would be very glad if some gentleman of the north would give me or the public all the information possible. Why do they not give us the facts fully?

The combined influence of climate and social condition is again illustrated by the comparative increase of the colored class north and south. It has been already stated that the whole population of Philadelphia, including white and colored, in the decennial period from 1830 to 1840, increased 35 per cent., while the colored, taken alone, shows an increase of but 18 per cent. From the constant escape of negroes from the slave states, and the protection offered them in Philadelphia, we should have expected a different result. I will here introduce an extract bearing on this point, from my article in the Southern Quarterly Review, January, 1846, on the Unity of the Human Race.

It occurred to me that one of the best methods of testing the influence of climate on the negro race, would be to ascertain the relative proportion of children, in different states, to the free colored women between 15 and 45 years, (the fruitful age.) I have accordingly constructed the following table from the census of 1840, in which is given all the free colored children under 10 years, and the colored females as near as possible. The census gives the free colored females between 10 and 24, between 24 and 36, and between 36 and 55. I have, therefore, taken half of the aggregate of the first and last, and added this amount to the whole of those between 24 and 36, which most give a sufficiently near approximation to the truth.

I have, in the fourth column of the table, placed the per centage of excess or deficiency of children compared with the females; and the excess or deficiency in each state is expressed by placing the sign *plus* or *minus* before the number expressing the per centage.

I have confined these statistics to the free colored population, because they are the most stationary; and similarity of habits and other circumstances render them the fairest test. There are some irregularities in these statistics which are difficult to explain, but if we take the aggregate of sections, or any rational view of the matter, I think they are not unsatisfactory. I give them for what they are worth, hoping they will at least lead the way to other observations.

	Number of free colored women between 15 and 45 years.	Free colored children under 10 years.	Per centage of excess or deficiency of children under 10 compared with the females.
Maine.....	280	296	+ 5
New-Hampshire.....	117	107	- 9
Massachusetts.....	1,782	1,807	+ 1
Rhode Island.....	850	673	- 26
Connecticut.....	1,836	1,902	+ 3
Vermont.....	156	167	+ 7
New-York.....	12,511	12,040	- 3
New-Jersey.....	4,874	5,853	+ 33
Pennsylvania.....	11,687	12,509	+ 7
Delaware.....	3,207	5,358	+ 33
Maryland.....	18,727	18,543	- 35
Virginia.....	10,457	15,857	+ 53
North Carolina.....	5,507	7,666	+ 39
South Carolina.....	1,776	2,795	+ 57
Georgia.....	515	802	+ 55
Alabama.....	406	572	+ 40
Mississippi.....	269	409	+ 50
Louisiana.....	5,892	8,178	+ 38
Tennessee.....	999	1,854	+ 95
Kentucky.....	1,276	1,984	+ 55
Ohio.....	3,558	5,190	+ 43
Indiana.....	1,348	2,370	+ 75
Illinois.....	696	1,084	+ 55
Missouri.....	298	345	+ 15
Florida.....	177	216	+ 23
Arkansas.....	81	144	+ 77
Michigan.....	148	173	+ 17
Dis. of Columbia.....	2,161	2,376	+ 9

The only line which can be drawn across the United States without intersecting states, is one about thirty-six and a half degrees of latitude, which very nearly bounds on the north, North Carolina, Tennessee, and Arkansas. The states of North Carolina, South Carolina, Tennessee, Arkansas, Georgia, Alabama, Mississippi, Louisiana, and Florida, are all south of this line, and the other states all north of it. From the abundance of provisions, the absence of malaria, the protection here given to the colored class, we might reasonably infer that they would be most prosperous and prolific in the northern division. The southern division comprises all the most sickly portions of our country, and the free negroes have less liberty and indulgence than at the north. A calculation made from the above table gives but about 25 per cent. more children than females in the northern division, while in the southern the excess is 44 per cent. The New-England states alone show 3 per cent. less children than females of the child-bearing age.

By the census of 1800, there were in the New-England states, of all ages, 17,317 free colored, and in 1840 there were but 22,633, or an increase only of 5,316 in 40 years! If climate and social condition have nothing to do with this result, I must leave it to others to show what becomes of the natural increase, and of the colored immigrants constantly coming in.

But, had we all the data necessary for fixing the value of life in the pure whites and blacks, another question arises with regard to the longevity of the mixed bloods or *mulattoes*. This question presents many ramifications, which are not only curious, but deeply important to the philanthropist. It has been more fully treated in some of its bearings than I have room for here, in the article alluded to in the Southern Quarterly, and I now shall merely touch it so far as it is connected with the value of life. Whether it be primitive or not, the white and black races are to all intents and purposes *specifically different*, and it is our business now to treat them as we find them in reference to our subject.

A writer in the Boston Medical and Surgical Journal, November, 1842, under the signature of "Philanthropist," who seems to be an earnest seeker after truth, uses the following language:

"From authentic statistics and extensive corroborating information, obtained from sources to me of unquestionable authority, together with my own observations, I am led to believe that the following statements are substantially correct:

"1st. That the longevity of the Africans is greater than that of the inhabitants of any other part of the globe.

"2d. That *mulattoes*, i. e., those born of parents one being African and the other white or Caucasian, are the shortest lived of any class of the human race.

"3d. That the *mulattoes* are not more liable to die under the age of 25 than the whites or blacks; but from 25 to 40 their deaths are as 10 to 1 of either the whites or blacks between those ages; from 40 to 55, the deaths are as 50 to 1; and from 55 to 70, 100 to 1.

"4th. That the mortality of the free people of color is more than 100 per cent. greater than that of slaves.

"5th. That those of unmixed extraction in the free states are not more liable to sickness or premature death than the whites of their rank and condition in society; but that the striking mortality so manifest among the free people of color, is in every community and section of the country invariably confined to the *mulattoes*.

"It was remarked by a gentleman from the south, eminent for his intellectual attainments, and distinguished for his correct observation,

and who has lived many years in the southern states, that he did not believe that he had ever seen a *mulatto* of 70 years of age.

"From a correspondence published in the Boston Spectator, in April last, are taken the following statistics:

"In a colored population of 2,634,348, including free blacks, there are 1,980 over 100 years of age; whereas there are but 647 whites over 100 in a population of 14,581,000.

"In Boston, the number of deaths annually among the colored population is about 1 in 15, and there are fewer pure blacks in this city than any other. The same comparative mortality between *mulattoes* and blacks exists in the West Indies and in Guiana, where unfavorable social causes do not operate against the *mulattoes* as in the United States."

Though they do substantially, my observations at the south will not fully corroborate all the above conclusions of "Philanthropist." My belief is that the *mulattoes* do die more than whites or blacks under 25, as they *certainly* do above this age, and that the pure blacks are destroyed by cold climate as well as the *mulattoes*, though the latter may be most sensitive.

I will here give the results of my own professional observation during twenty years at the south, which I feel assured time and experience will substantially confirm. The facts were forced upon me during my intercourse with the colored class, and attracted my attention long before I had formed any theory on the subject, and at a time when my convictions were the opposite of what they now are.

1st. The *mulattoes* are intermediate in intelligence between the blacks and whites.

2d. They are less capable of enduring fatigue, exposure, and hardships of all kinds, than either blacks or whites.

3d. The *mulatto* women are peculiarly delicate, and more subject to a variety of chronic diseases peculiar to females.

4th. The women are bad breeders and bad nurses—many do not conceive, and most are subject to abortions, or premature births.

5th. The two sexes, when they marry, are less prolific than when crossed on one of the parent stocks.

6th. The specific difference of the races is strongly illustrated in the exemption of the negroes from yellow and congestive fevers; not only the negro, but the quarteron, though a native of a cold latitude, is to a great extent exempt; there are occasional exceptions, and it is well known that yellow fever, like cholera, has often been fatal to domestic animals.

The above facts, which I think will in the main hold good in all the Atlantic states, and are more marked the farther north we look, would seem to be contradicted to a consider-

able extent, if not wholly refuted, by an opposite state of things on the gulf. I hope the contradiction, however, will prove to be only apparent.

The mulattoes, by which I mean all grades of mixture, derived from the early population of Pensacola, Mobile, and New-Orleans, and who are a mixture principally of French and Spanish blood with that of the negro, present very different physical characters from the mulattoes seen in the Atlantic states, who are derived mainly from the Anglo-Saxon race. The complexion on the gulf of the colored creoles (as they are called) is a strong copper, or bronze of different shades, which is agreeable to the eye, and strikingly different from the chalky, sickly hue of the others; they excite at once in the mind the idea of a *new*, or *distinct* race—are well formed, more robust and hardy, and their features often regular and handsome, partaking little of the contour of the negro; they are also much more prolific and long-lived than the mulattoes of the colder states. A stranger coming to Mobile, or New-Orleans, could not fail to be forcibly struck by the physical peculiarities of these colored creoles, many of whom resemble so closely certain Mongol tribes, as to give strong support to the suggestion of Dr. S. G. Morton, that the latter *may* possibly be a mixed race of Caucasians and negroes; an idea which will be much strengthened by his remarks on the influence of climate on hybridity. Their hair is often as straight, black, and glossy as that of the Chinese or Indian; the high cheek-bone and obliquity of the eyes is not uncommon. In looking over the well-executed heads in Richards' Physical History of Man, I can find no type of the colored races of the *old world*, as the Mongol, Hindoo, Malay, &c., of which I have not seen a good imitation in real life among the colored creoles of Mobile and New-Orleans; but it is remarkable that they show *no resemblance to the aborigines of the new world*—these stand out from the rest of mankind, as Dr. Morton's *Crania Americana* will show, as boldly as a new and distinct creation.

It is perhaps a difficult task to account for the above differences between these creoles and the mulattoes of colder climates; it is possible that a reason may be found in certain affinities or repulsions of certain races, which fits or unfits them for perfect amalgamation. The population of Germany, France, Spain, Italy, England, Ireland, and Scotland, is such a heterogeneous compound at the present day of aborigines, Celts, Slavonians, and Germans, that there are now endless disputes as to the original physical character of each of these latter races, and as to the blood which now predominates in each country. The modern Britons, and the Germans, from whom they are principally descended, are usually much more fair in complexion than the French,

Spaniards, Italians, Russians, Poles, &c., who, Lawrence and others maintain, are derived from the Celts and Slavons, of dark skin, hair and eyes. Explain the fact as we may, it is to my mind evident that negroes amalgamate much better with the dark than the fair races.

When we reflect on the specific difference between the two races, (Caucasian and Negro,) and the many peculiarities which belong to the mulatto, I think we are justifiable in regarding the latter as a hybrid. I have shown on a former occasion that naturalists have been able to lay down no rule which could offer the slightest objection to this idea. We have shown also that different hybrids are subject to very different laws; some are prolific and others not, &c. Why may it not be a law of the human hybrid, that it is more delicate, less hardy and long-lived than the parent stocks? There are facts in natural history which lend support to this idea.

Dr. Morton, the distinguished author of the *Crania Americana* and *Egyptica*, in a paper read last November before the Academy of Natural Sciences in Philadelphia, on "hybridity in animals and plants, considered in reference to the question of the unity of the human species," gives us some interesting facts, which may account more satisfactorily for the distinctive character of the mulattoes north and south. After showing that not only different *species*, but *genera* produce prolific hybrids, he gives facts to prove that climate has much to do with the fecundity of certain hybrids; they may not breed, for example, in a cold climate, but will in a warm one, which is more congenial to their nature. Such would seem to be the case with the mulatto or hybrid offspring of the Caucasian and Negro races; the facts can be clearly established that the mulattoes (the colored creoles at least) of Mobile and New-Orleans are more prolific, more hardy, longer lived, and in every respect a superior race to those of the north. My observations for some years were made on the mulattoes of South Carolina, and, even as far south as this, their inferiority is manifest.

The facts and deductions thus far presented would lead very strongly to the conclusion that the black slaves of the south are very safe risks for insurance; but though fully persuaded of the favorable position of this class, both as to climate and social condition, in reference to health and longevity, and though deeply impressed with the importance of this branch of life insurance to the slave states, still I must say that I believe there are yet no data by which the value of these lives can be fixed with sufficient accuracy to justify the thoughtless procedure of some companies.

The mortality among the colored class in Charleston, including blacks, mulattoes, slaves,

and free, is 1 in 44 annually; and though this is a more favorable table than can be found in any laboring class in the world, and though even this mortality might be greatly diminished could we separate the free and the hybrids from the black slaves; yet it must be remembered that among the whites it is only the better class that apply for policies, and that the negroes are the laboring class of the south. It is a well-known fact, that as you rise in the scale of society, so does the longevity increase, simply because the upper classes are less exposed to the causes of diseases, and can command comforts and prompt medical advice in sickness. The experience too of insurance companies in Europe, shows that there is far less mortality in their selected lives than in the aggregate population of a nation. It cannot be reasonably expected, then, that the slaves at the south can equal in longevity the better classes of Europe, or the selected lives of insurance companies.

The black slaves, though generally treated with kindness and indulgence, are the laboring class—are exposed much to the causes of disease, and are less protected in sickness than the higher classes; like the man-servant and maid-servant of the free states, they are less cared for in sickness and health than the master and mistress. The longest lived class in England are the nobility; and though poverty in itself may not be a sin, it is not only a disgrace, but tempts many a poor fellow to sell soul and body both.

"Lord lead us not into temptation," is the wisest prayer ever uttered—it contains a profound reflection on human nature. Men are prone to become very good and pious when they get too old to be tempted, and we would therefore pray daily not to be tempted. Life insurance on negroes offers strong temptations to be feared, many of which I have not time to enumerate.

When a company insures the life of a free man, it has the best of all guaranties against foul play, viz.: the innate love of life of the insured party. But, on the other hand, we occasionally see at the south unfeeling masters, as we do unfeeling husbands, cruel fathers, and cruel masters to apprentices, in the free states; and such individuals will not show any increase of kindness during sickness, should their interest be opposed to humanity. As long as the negro is sound, and worth more than the amount insured, self-interest will prompt the owner to preserve the life of the slave; but, if the slave become unsound, and there is little prospect of perfect recovery, the underwriters cannot expect fair play—the insurance money is worth more than the slave, and the latter is regarded rather in the light of a superannuated horse.

Human nature is the same every where, and at all times. See how the English manufacturer coins his guineas out of the exhausted

frames of his wretched operatives; after one set of victims is worked to death, another is at hand ready for the sacrifice. So with the southern masters; though their slaves, as a general rule, meet with more kindness than any laboring class in the world, yet when it ceases to be the interest of the owner to preserve the life of the slave, he will in many instances cease to be careful of it. Any man who will drive a horse cruelly, will drive a negro or operative to death, if he can gain any thing by so doing.

Suppose a thousand slaves to be insured for seven years, and at the end of one, two, three, four, or five years, a portion of them should become unsound, and it is no longer the interest of the owners that they should live out the seven years; would not many be like the Yankee captain with the insured ship, "Damn the old hulk, let her sink—I am safe." That "Almighty Dollar" would soon silence the soft, small voice of humanity.

We have every reason to believe that many unsound negroes would be insured fraudulently, which could be easily done—and it is a singular fact, that the negroes who will nurse the master with untiring devotion and kindness, night and day, are, like dogs, utterly regardless of each other's wants in sickness; this is a characteristic in freedom or slavery.

It would be unsafe to insure negroes on plantations in the country, because it is impossible, I fear, to get competent and reliable medical examiners, and for other reasons. Most of the applications would probably be from the towns. It has not been, nor do I think it is likely to become, the custom of masters to insure slaves, except in those instances where they suppose some extraordinary risk to life is incurred, and if such risks alone be taken, the chances must be against the underwriters. I will mention for example the fact, that most of the negroes presented to me for insurance have been deck hands of steamboats, who, besides the danger of being blown up, are exposed to other dangers much greater; at one moment they are employed as firemen, and at the next, they are rolling cotton bales down the river bank at midnight in a cold rain. Many are consequently attacked by pleurisy, and other acute diseases; they are not unfrequently seriously injured by blows from the cotton bales while rolling down the high bluffs, and lastly, they often become intemperate, and contract other bad habits which lead to disturbance of health.—*Not.*

Since the above was printed, we have received the following letter from Dr. Nott, which is worthy of attention:

THE SLAVE QUESTION.—With what intense

anxiety are the eyes of the whole country fixed upon the meeting of our next national assembly! Do we not all feel that we are on the verge of a struggle which must shake the Union to its very foundations! The social position of the negro race, and its influences on the various sections of the country, is to be discussed, and, in my opinion, most of the leaders of public opinion, north and south, are wholly unprepared to meet the great difficulties that complicate this subject; and the facts I have here and on former occasions alluded to, call loudly upon the attention of the statesman, the patriot and philanthropist. All the reasoning and action of legislators heretofore have been deduced too much from the history of the Caucasian race, as if the question were settled that the white man and negro are essentially the same, and demand the same course of policy. When we ask for *facts*—for some clear light of experience, drawn from the history of the past, to lead us out of the labyrinth in which fate has placed us—we are answered by the sentimental abstractions of the closet. But, Mr. Editor, these great difficulties cannot be met and overcome by abstractions. We must look to the natural history of the races for light; and I have no hesitation in asserting that nothing wise—nothing productive of substantial good to the negro race—can be effected without a full knowledge of their physical and intellectual character.

Can humanity look without a shudder upon the reckless impetuosity with which demagogues and fanatics decide great questions like this, involving the lives, fortunes, and happiness of millions of human beings, without the slightest knowledge of those facts which are indispensable to the formation of a rational opinion? The angry and senseless discussions on negro emancipation, which have agitated Christendom for the last half century, were commenced in ignorance, and the abolitionists have only become more angry and unreasonable as facts have risen up against their theories.

It has become evident that this controversy, as now conducted, must lead to consequences fraught with evil both to the white and black races. Is it not time, then, that good and wise men should rise up, inform themselves thoroughly, and, looking the difficulties full in the face, adopt such a course as reason and humanity shall dictate!

The object of the honest abolitionist must certainly be, to better the condition either of the white or black races. How are the whites to be benefited? What the distant future may bring forth, human sagacity cannot foretell; but we know that all great and sudden changes in the policy of a coun-

try must be productive of distress; and no one can doubt that emancipation of the southern slaves would, for a long series of years, be followed by utter destruction of the great staples of the south, and a corresponding destruction of the manufacturing and other interests of the north. It would not stop here; but the older nations who are fed by our commerce would suffer, even more, perhaps, than ourselves. Should such consequences be hazarded without good and sufficient reasons? But how are the blacks to be benefited by emancipation? This is the great point on which the controversy should run. Where are we to look for light on this point, either in the history of the past, or in the teachings of the present day? Will some abolitionist talk to us sober sense and reason, and demonstrate some plan by which the negro can be made free, prosperous and happy? I am a slave owner, and while on the one hand I shall, in common with the southern people, resist all encroachments on our constitutional and natural rights, I am, on the other hand, free to say that I am ready to advocate any scheme of emancipation which will insure to the slaves of the south greater happiness than they now enjoy. Every candid and intelligent man, who has examined the facts, must acknowledge that the negroes of the southern states are infinitely better off than those of Africa, all of whom are the slaves of barbarian chiefs; that they are in a far better condition, morally and physically, and more happy, than those of the free states; that they are in every respect in a better condition than the emancipated blacks of the West Indies; and that African colonization, and the long and painful labors of missionaries, have so far resulted in no good.

Whether the negro be of distinct origin—whether he be a descendant of Adam, changed by the long continued action of physical causes, or whether the Almighty has, by a direct curse, blackened his skin and clouded his intellect, it is not our intention here to inquire; but it cannot be denied that the negro *now* presents peculiar physical and intellectual characters. We must, therefore, take him as we find him, and for all practical purposes it is immaterial which theory we adopt. The true questions to be decided are—To what position among mankind is he *now* best suited? and, to what position more exalted can time and experience elevate him?

Though many contend that mental cultivation, continued through several generations, may greatly improve a race, no one of our authoritative writers on the natural history of man, whether Christian or Infidel, whether advocating or opposing the

unity of the human race, can be found to maintain the intellectual equality of the black and white races.

Experience teaches that none but an intelligent people are fit for any form of government short of an absolute despotism, and it is difficult to imagine how the negro is to be sufficiently enlightened to qualify him for self-government. He cannot be educated to any extent while a slave, because he becomes unfit for slavery and dangerous to the master. He cannot be liberated and allowed to remain where he now is, because a large population, so indolent, improvident and vicious as free negroes every where are, could not be tolerated in any country. Could Alabama, for example, permit her 300,000 slaves to be freed and turned loose within her borders? And I would ask the states north of the Potomac, if they would vote for the emancipation of three millions of slaves, with the "*proviso*," that when liberated they should all settle at the north? I have no doubt that the abolitionists of the north would sooner vote that all the tribes of Africa should be turned over to the devil without benefit of clergy. Self-preservation equally forbids that such an idea should be entertained for the southern states.

But one scheme, then, can be seriously entertained, viz., that of colonization; and it is much to be desired that some one would give us a project by which these millions of ignorant, stupid negroes can be successfully colonized, and kept from relapsing (as they are rapidly doing in St. Domingo) into African barbarism. The experiments in colonization, and even the gigantic efforts to suppress the slave trade, have so far been productive of nothing but evil; and we have every reason to believe, that if the negro *can be* so improved as to qualify him for self-government, a long series of years will be required to effect such a result. The monumental history of Egypt, according to recent researches of Bunsen, Lepsius, and other learned hierologists, shows, beyond dispute, that the negro presented the same physical and intellectual characters 5,000 years ago that he does now; and how long, may it be asked, will it take to bring him up to the Caucasian standard? I deny, positively, that there is any evidence in the history of the past, or the experience of our own times, to prove that the brain of a race can be enlarged and the intellect expanded by cultivation through a series of generations. The skulls of the untutored Germans of antiquity—of the Greek peasants—of the ancient Britons, and of the wandering Circassians, who are now bidding defiance to the Emperor of Russia, are as well formed as those of the nobility of England of the present day. Baron Larrey, whose authority will not be questioned in this matter, tells us that the wandering Arabs have the finest formed

brains he ever saw. The Caucasian head is always ready formed, and when the spark is applied the intellect blazes forth. Wherever this race is brought under a good government, great men spring up from the very forests. Can any one believe for a moment that the genius of Alexander, Cæsar, Napoleon, Hannibal, Newton, La Place, Ouvier, Shakspeare, &c., is attributable to cultivated ancestry? No—the same blood has been coursing through the veins of the race from Adam down to the present day.

But let us suppose, for a moment, that the negro really is susceptible of progressive improvement. Where is the nation willing to devote the time and money necessary for the perfection of three millions of negroes? Will Old England? No. Will New-England? No. They may both be ready to sacrifice both the whites and blacks of the south on the altar of false humanity, but neither will stretch out his hand to offer substantial aid in the cause.

I must bring this hasty letter to a close, but hope I have said enough to make apparent the paramount importance of *negro statistics*. If the blacks are intellectually inferior to the whites—if the whites are deteriorated by amalgamation with the blacks—if the longevity and physical perfection of the mixed race is below that of either of the pure races, and if the negro is by nature unfit for self-government, these are grave matters for consideration. These conclusions I solemnly believe to be true, and that full investigation will only tend to confirm them; and I may add, that my conviction is the result of much personal observation and careful perusal of every work of note on the natural history of man in the French and English languages.

The negroes have attained a greater moral and intellectual elevation—greater physical development and longevity, and incomparably more happiness, in our slave states, than they have ever enjoyed under any other circumstances. Every feeling of humanity, then, and every motive of policy, should bid us handle gently a question of such extreme delicacy. We have yet no light to guide us safely in a change; and as we know that the southern people are responsible to God alone for their sins, and that it is his hand at last that rules the destinies of nations, it would be better, far, to leave this question to the slow but certain work of time and experience. (Mobile, Ala.)

PHYSICAL AND MORAL CONDITION OF BLACKS, NORTH AND SOUTH.*—We have lately taken some pains in examining the reports of 1845, 1846, and 1847, of the *Prison Discipline Association*, kindly furnished us at the office in New-York, in the hope of finding statistical information which might be of value in con-

nection with the subject of the above article; but, unfortunately, the same fault may be found with these reports as with all others, that they do not sufficiently discriminate between black and white. However, such facts as we could gather, after a search of a thousand pages, we present. They pertain as much to the morals as the longevity of northern negroes.

MORTALITY OF PHILADELPHIA.

Penitentiary.

Years.	Whites, per cent.	Blacks, per cent.
1830	4.19	0.
1831	4.18	10.02
1832	1.44	13.52
1833	1.11	0.
1834 .....	.8	6.68
1835	1.26	4.61
1836 .....	.99	6.74
1837 .....	.8	6.49
1838	2.92	11.80
1839 .....	.81	4.62
1840	3.88	8.02
1841	1.97	4.61
1842	1.41	9.08
	<hr/> 27.24	<hr/> 86.14
	2.09	6.62

City.

1821	2.31	5.92
1822	2.39	4.65
1823	2.96	5.71
1824	2.85	5.71
1825	2.36	3.70
1826	2.48	3.82
1827	2.11	5.29
1828	2.29	4.81
1829	2.27	4.22
1830	2.20	3.68
	<hr/> 24.22	<hr/> 47.51
	2.42	4.75

"It will be perceived," says the report of 1845, (from which this table is taken,) "that these numbers are to each other in the proportion of 1 to 1.96. That is, out of 1,000 of each color residing in the city, 196 blacks die for every 100 whites; and for every 1,000 of each color in the Penitentiary, the astonishing number of 816 blacks to every 100 whites. Returns from the Philadelphia County Prison, for the last ten years, show that out of 101 deaths in that establishment, 54 died of consumption. Of these, 40 were colored, and 14 white."

In the Wethersfield Penitentiary, from March, 1841, to March, 1844, the average of deaths was 2.82 for whites, 10.96 for colored.

Eastern Penitentiary, Pennsylvania, for three years, ending 1843, 1.85 per cent. deaths, white; 6.68 black. In the Philadelphia prison, for ten years, ending 1845, white prisoners, 1,179; black, 1,089; deaths, white, 1 in 46; black, 1 in 12. The whole admission of convicts in the Eastern Penitentiary of Pennsylvania, from October, 1829, to December, 1845, was 2,054, of which 692 were black, or about one third! This frightful immorality and crime of the black population will be understood when it is reflected how small a proportion of the population of Pennsylvania, or even of Philadelphia, it embraces. Extraordinary as it may seem, in 1840 very nearly 140 per cent. of the inmates of the same prison were colored! "Perhaps," says Dr. Ginn, the physician in charge, in his report, "the most striking feature is the great disproportion between white and colored deaths—a disproportion that has engaged the attention and sympathy of some of our most enlightened and benevolent citizens, and given rise to various hypotheses. If my experience, &c., justify, I would say, without hesitation, it is owing entirely to their utter neglect of the necessary means of preserving health, extreme sensuality, &c. This opinion I believe myself in possession of sufficient facts to substantiate," &c.

In 1845, Matthew L. Bevan, Esq., President of the Eastern Penitentiary of Pennsylvania, adverts again to the subject: "The increase of deaths comes from blacks. This increase of mortality is found in the fact that those colored inmates from the county of Philadelphia, are so constitutionally diseased, as under any and all circumstances to be short-lived, from their character and habits. They die of constitutional and chronic disorders, which are general among their order, owing to the privations they undergo, and the want of proper attention in infancy, and their peculiar mode of living." Mr. Bevan concludes: "Indulging in the use of ardent spirits, subjected to a prejudice, which bids defiance to any successful attempt to improve their physical or moral condition, from youth to manhood, sowing the seeds of disease in their constitutions, and at last becoming inmates of prisons." !!!

These sad and mournful pictures from a city like Philadelphia, where the blacks might be supposed as favorably situated as freedom could make them, are worthy of deep contemplation. If, after a period of so protracted freedom, their condition has, so far from improving, sunk lower and lower, beyond measure lower than in any city where the institution of slavery exists, it would seem full time for blind and raving sentimentality to come to its senses, and let alone what it is incapable of meddling with without mischief. If, however, the "equality" of the negroes north, south, and east is the point, degrade

the southern, or, what is the same thing, as Philadelphia shows, free them, and you have the desired result.

We introduce a few more facts from the Prison Discipline Reports. In the New-York Penitentiary, 1846, there were 788 whites, 96 blacks, or 1 in 8. The blacks in New-York do not exceed, if they equal, 1-50 of the whole population. In the City Prison the blacks were about 30 per cent, or 1 in 54. The reader will understand what is the relative proportion of black and white population in the city of New-York. At Sing Sing, 1846, there were 854 inmates, of which 193 (1 in 44) were black. One seventh of the commitments of that year were black. Of the committed, 400 were intemperate—110 being blacks. Number of deaths in prison among blacks, in 1846, were 29—4 being of consumption, and 7 rheumatism.

Dr. Welch, in his report of 1844, says: "It also appears from the records of the State Prison of Connecticut that, since the commencement of the institution in 1828, *half of the deaths have been among the blacks, amounting to 5.40 per cent., whites, 1.07 per cent.*" He also refers to the authority of Dr. Nott, of Mobile, in support of his opinion that *the blacks of the north possess "less vitality than the whites."*

We regret that our data at this moment are so incomplete. They, however, present some food for reflection. One might think that our friends and fellow-citizens at the north would have enough to do to look after the condition of their own affairs, instead of troubling themselves with ours. We do not envy them their occupation in either case.

NEGRO SLAVERY.—THE ORIGIN, PROGRESS, AND PROSPECTS OF SLAVERY IN THE UNITED STATES, &c.—Whatever definition may be given to slavery, or by whatever laws it has been conceived necessary to regulate it, nothing can be more clear than that the *personal* character of the slave, or his rank as an element of population, distinguishes entirely the relation, and that the idea of *property* is a subordinate one, *sui generis*, and in but a limited degree analogous to what is usually understood by that term in its technical sense. Property gives the absolute power and control, not only over, but *in*, the subject, without any limitation or restraint, except so far as the rights of others shall not be interfered with. It exists by my will, and I may change, alter, or destroy it. No such power is, or perhaps ever has been, claimed or exercised over the slave, since the Christian world first abandoned the barbarous doctrine that an infidel was not entitled to the rights of a human being.

The power which the master exercises over a slave is far more analogous to that exercised upon an indentured apprentice than to any power claimed over a mere chattel. The

apprenticeship may be as *involuntary* as the slavery in its incipency and continuance, and very often is. The apprentice and the slave are both for a term of years, the one being for a lifetime. The master's power, in both instances, extends to the entire regulation and control of the person, and the absolute enjoyment of his labor. In both instances is he responsible to the law for an abuse of power. The obligations of the master are identical in kind, though not in degree—support, or support and instruction. In either instance there is room for much kindness and much tyranny.

The analogy between the slave and the apprentice fails in these respects, that the master may at any time transfer to another his right in the personal services of his slave, and has the same disposing power over his offspring born during slavery. It is evident, however, that these are not *necessary* and characteristic elements of slavery, any more than the absence of a transferring power is necessary in apprenticeship. The master's obligations to the slave are not personal to him, are not founded upon any particular skill which may be peculiar, but may be performed by any of the human family. He has been at the whole expense, care, and concern of raising and providing for the offspring of the slave during infancy and childhood, and has a well-established claim to be reimbursed. The child is but naturally substituted to the parents. The consideration is a clear one which the slave receives; and, should one pretend that it is inadequate, he will have enough to do to travel the world over in search of the labor which meets with an adequate consideration.

The truth is, the power of the master over the slave is only that of controlling his labor, and he is entitled to use all the means necessary for that purpose. Without inquiring into the foundation of the right, it is evident that this power of the master no more affects the individual and personal character of the slave, than that of the capitalist, all the world over, and especially in the great manufacturing towns of England, over his operatives. It is idle to pretend that the labor of the latter is not as imperiously bowed down and controlled by the sternest dictates of necessity, and without the hope of change or improvement, as that of the former. The English master has the absolute power over the bread—the life of the laborer, and that of his children; how much more over his labor!

As persons, then, and population, we proceed to consider that whole class, in our country, not embraced under the head of free white citizens and "Indians untaxed." We shall trace the history of their introduction, their progress, their relations, and their numbers. Having concluded this branch of the subject, we shall proceed to discuss the qualified right of property which is maintained over them, showing its foundation and extent, its expe-

diency and necessity. These matters are too important to be passed over in times like these. It is necessary that we all clearly and fully understand them. It will be thus seen we have opened before us the subject of slavery in all its aspects, political, civil, religious, historical, and economical.

The first attempt to introduce negro slaves within the United States was in 1645, by a citizen of Boston, and it was not until 1670 that the first cargo of African slaves were brought to Virginia, by a Dutch vessel, and sold. The increase in that colony was at first very slow. In 1671, Sir John Yeamans introduced slaves into South Carolina, from Barbadoes, almost coeval with the establishment of the colony. The increase in this class, by propagation and immigration, was very rapid, doubling, before long, the number of the whites. Maryland, also, in 1671, passed a law for "encouraging the introduction of negroes and slaves."

From this period, the introduction of slavery became general in all the American colonies, increasing by natural means and by the slave-trade, so long as that was permitted, and since, by the ordinary augmentation of population.

At the period of the first census of the United States, in 1790, we find that slavery existed in all of the states and western territories, except Massachusetts and Maine, which were at that period united. In Massachusetts, however, exist various early laws in regard to slavery. In 1691, the general court decreed, "that there shall never be any bond-slavery, &c., among us, *unless it be lawful captives taken in just wars, or such as willingly sell themselves, or are sold to us, &c., provided this exempt none from servitude who shall be judged thereto by authority.*"*

In 1708, a duty of £4 was laid upon every negro imported into Massachusetts.† The same year, we find a law of the general court, relating to mulatto and negro slaves, *prohibiting their manumission*, without previous security that they should not afterward be at the charge of the colony, and all other manumission to be void.‡ In 1738, the number of blacks were 2,000; whole population, about 50,000. In 1763, the blacks were 5,000; whites, 240,000. What portion were slaves we are unable to say, though it was judicially declared, after the revolution, in Massachusetts, that slavery was virtually abolished by the constitution of the state.*

The census of 1790 showed 697,697 slaves in the United States, or nearly 17.76 per cent. of the whole population. The free colored were 59,466, or 1½ per cent.; the free negro and slave population together, being about one

fifth of the whole. In those states where slavery has been subsequently retained, the proportion was, of course, largest, being about 35 per cent., or one third. In South Carolina, the proportion of slaves was most considerable of all, being 48 per cent., or nearly one half; in Tennessee the proportion was least, being 9.6 per cent., or one tenth. The proportion of free blacks was largest in Rhode Island, 3,407, or one twenty-third, and in Delaware, one fifteenth. In Massachusetts and Pennsylvania, they were one seventy-fifth, and in Maryland, one fortieth of the whole population. Virginia had 1.70 per cent., South Carolina, .07 per cent., of free blacks.

The census of 1800 showed 898,041 slaves, and 108,395 free colored—being a proportion in the former of 16.88 per cent., and 2.05 per cent. in the latter. Thus was exhibited a *decline in the proportion* of slaves to free whites of .73, or nearly 1 per cent., and an *increase* in the proportion of free negroes of .54, or ½ per cent. The proportion of whole colored to whole white had lost .89, or ⅓ of 1 per cent. The increase of slaves in ten years had been 27.96 per cent., being 7½ per cent. less than the increase of whites; the increase in free colored being 82.28, more than twice as great as that of the whites. The increase of whites was, of course, greatly affected by immigration, that of the free colored by emancipation. The slaves lost by emancipation, and gained by a few importations still from Africa, perhaps equally. Their increase may thus be considered a *natural* one. The colored population of the New-England states increased in ten years but 9 per cent.; the same population in the south increased 38½.* In all the slave states the proportion of slaves was 35 per cent., being a white gain; the slaves, from being somewhat more than a third of the whole population, became somewhat less. South Carolina still continued to show the largest proportion of slaves, 42.3, showing at the same time a slight decline. Delaware showed the least, 9.6 per cent. The free blacks of New-England had increased about 38 per cent., while the slaves there had lost 60 per cent. Now, either the black population of New-England, or the slave portion of it, had been sold to the southward, or it exhibits the *lowest* increase known to our population.†

The census of 1810 indicated 1,191,364 slaves, and 186,446 free colored; an increase in the slaves of 33.40 as against 27.96 in the previous ten years; of the whole colored, 37.58 against 32.28. To account for this enlarged increase, it must be remembered that Louisiana had been purchased with slaves and colored, and that Africans were continually imported up to 1808. The increase of whites,

* Ancient Charters and Laws of Massachusetts Bay, Boston, 1841, p. 58.

† Collection Massachusetts Historical Society, vol. iv, p. 196.

‡ Ancient Charters, &c., Massachusetts Bay.

§ Kent, vol. II., Com. Slavery.

* Mississippi territory excluded.

† See Tucker on the Population of the United States.

owing to immigration, was $2\frac{1}{2}$ per cent. greater than that of slaves, and $1\frac{1}{2}$ less than that of the free blacks. In this ten years, the whites gained very slightly upon the slaves, and the whole colored population gained upon the whites. In the slave states the free colored gained 1 per cent. The slaves gained also, and, from a little less, had become a little more than one third. The increase of blacks in New-England exceeded 7 per cent, being a loss of 2 per cent. Their increase in slave states was nearly 35 per cent.—a gain of $1\frac{1}{2}$ to 2 per cent. The proportion of slaves to whites is still highest in South Carolina, 47.8 having gained 5 per cent. Louisiana stands next, 45.8; then come Mississippi, Georgia, and Virginia.

The census of 1820* showed 1,543,688 slaves, and 238,197 free colored, an increase in the slaves of 29.57, being nearly 2 per cent. more than the increase of the ten years ending 1800. The whole colored increase was 29.33 per cent. against 37.58; free colored, 27.75 against 72 per cent. The white population gained 1 per cent. on colored, the same on slaves; the free colored gained one tenth of 1 per cent. The falling away of the increase of slaves was owing to many elopements of this class during the war, &c. In the slave states the free colored had remained stationary, and the slaves had gained nearly 1 per cent.; the whole colored had gained on the whites $\frac{1}{2}$ per cent., nearly. The increase of blacks in New-England was still about 7 per cent.; at the south, 30 per cent. The proportion of blacks in South Carolina remains highest, 51.4, having gained 4 per cent. In Louisiana, 45 per cent.; Georgia and Mississippi, 43 per cent. The free blacks to whole population have declined in Louisiana, Missouri, and Georgia, an average of near 2 per cent, but increased in all the other slave states except Delaware; in no instance, however, more than $\frac{1}{2}$ per cent, and in some instances, a mere fraction.

The census of 1830 included 2,009,043 slaves, and 319,599 free, an increase in the slaves of 30.75, being an augmented increase of 1 per cent.—in the whole colored, 31.37; also an increased increase of 2 per cent.† The white population gained slightly on the colored, and the colored on the slaves. The free colored in slave states increased one tenth of 1 per cent.; the slaves gained $\frac{1}{2}$ per cent, and the whole colored had again gained on the whites. The blacks have actually lost 16 in New-England, whereas at the south they have gained 527,533, or about one third of the original number. The proportion of

slaves has, in ten years, increased 8 per cent. in South Carolina. In Mississippi, 5 per cent, and are 48.1 of the whole population. In Louisiana they were 50.8, an increase of 5 per cent. The free blacks increased in Maryland, District of Columbia and Delaware, 2 to 3 per cent.; in Kentucky, 1 per cent. In other states, trifling losses or gains.*

By the census of 1840, it appeared there were 2,487,350 slaves, and 386,348 free colored persons in the United States, an increase in slaves, in ten years, of 23.81; of free colored, 20.88; a decline in the increase of this population of 13.97 and 6.94 per cent. Professor Tucker argues a very great error somewhere. Though free blacks have emigrated to British provinces, and slaves have been carried to Texas, the numbers were not sufficient to affect, in any degree, the result. The whites have hence gained largely upon the colored, supposing the returns correct, and the free colored have diminished in their ratio of increase. The latter have declined, in proportion, in the slave states, as also have the slaves; the last, in extent, more than one half per cent. The proportion of slaves has increased in South Carolina, and is still largest. In Mississippi it is fifty-two per cent.; in Louisiana it appears to have lost two per cent., being now less than half. In the southern states, the free blacks have ceased to increase with the same ratio; the proportion in Louisiana remains largest, being seven per cent. of the whole population. Virginia comes next. The blacks of New-England increased six per cent. in ten years; those of the slave states, twenty-six per cent.† By this census it appears that every state returned slaves, except Maine, Vermont, Massachusetts, and Michigan. By the last census, Massachusetts and Vermont only were exempted.

We have thus traced the progress of slavery in the United States, from the first introduction of the institution down to the completion of the census of 1840. The decennial enumeration to be taken the present year, 1850, and hereafter, will show something like the following, supposing the ratio of increase of slaves and free blacks to be preserved:

	Slaves.	Free Blacks.	Total Slave and Free.
1850†....	3,059,441	463,617	3,523,058
1860....	3,763,112	566,340	4,319,452
1870....	4,628,627	667,608	5,296,235
1880....	5,693,211	801,139	6,494,354
1890....	7,002,649	961,355	7,962,004
1900....	8,613,258	1,158,628	9,766,884
1910....	10,594,307	1,384,361	11,978,668

It is possible the free blacks may increase

* 1820 is compared with 1810, so as not to allow the calculations to be affected by the purchase of Louisiana.

† The returns are corrected for two months, as the census was taken in a different month.

* Florida had been purchased.

† See the actual returns of this census under heads POPULATION—UNITED STATES.

in a greater, and the slaves in a less ratio, without affecting the sum total of increase of the two classes. A diminution in the increase of slaves may result from frequent emancipation, from emigration from the country—but this must be very inconsiderable—or from a lower degree of productiveness, the result of lower physical comfort, diminished valuation, and less industrial uses, &c. We see no reason to allow much for the operation of these causes within the next half century, and may safely estimate ten millions of blacks and colored in the country at the close of it.

It is also clear, from our investigations, that no state, or class of states, can be more responsible than another for the introduction and extension of the institution of slavery in the Union. The results show, too, that, in a condition of freedom, the blacks of New-England have been situated most unpropitiously, as indicated in their trifling increase of numbers—unless we suppose they have passed southward, as general emancipation was expected, or took place in this quarter. Taking the whole Union into account, whatever the merits or demerits of the institution of slavery, ours is but a small share of responsibility for its continuance, and none for its introduction.

The history of slavery carries us back to the origin of society itself. It was found in the earliest advanced nations of antiquity. To attribute its derivation to war is absurd; for, admitting *servus* to be derived from the Latin *servare*, (to preserve a captive,) slavery, we know, was old before Rome had been founded. Perhaps the most curious and ridiculous position is that taken in the *Encyclopædia Britannica*, that it originated among the antediluvian giants, whose name implied as, saulters of others. Nimrod, according to the same authority, was one of its authors—since the Bible tells us he was a mighty hunter before the Lord! To such stuff are authors driven in maintaining their favorite theories.

The fact is, that, immediately after the deluge, we have a decree of God himself, condemning the children of Ham to perpetual servitude, using the very Hebrew word which translators render *slave*. After a few generations, slavery is referred to as a well established institution—for Abraham, the patriarch, had 318 slaves. (Gen. xiv.) The laws of God strictly regulated this relation in all its aspects, and his own peculiar people were commanded to buy slaves from the heathen, and not to steal them, and instructed how to treat them after they were bought, &c.*

It is said that the heathen, taking advantage

of this mild slavery, tolerated by God, established a much worse kind among themselves. However this may be, and it is not improbable, many of the Jews, also, abused the institution, as they did other laws; we may well affirm that slavery presents no worse aspect in the civilized nations of the present day, than it did among the Hebrews.

In *Homer*, one of the oldest historians extant, there is abundant evidence that all captives were considered slaves; and Ulysses relates his escape from a Phœnician, who had doomed him to Lybian slavery. Thus have we the slave trade at that early period. Philip of Macedon sold the captive Thebans, in which example he was followed by his son, Alexander the Great. In Athens, during the most polished ages, slavery was a well-established order, although it is said that slaves were treated with more leniency than among other nations. In Rome and Sparta the worst features were exhibited. The Spartans butchered their slaves, when, by reason of great numbers, they would likely become dangerous. Camillus, one of the most accomplished generals of the Roman republic, sold his Etrurian captives to pay the Roman ladies for the jewels they had presented to Apollo. Fabius sold 30,000 citizens of Tarentum to the highest bidder. Julius Cæsar did the same with 53,000 captives. Even debtors were allowed, by the twelve tables, to become the slaves of their creditors. So numerous were the slaves owned by the rich patricians, that Isidorus, who was almost a cotemporary with our Saviour, left to his heirs 4,116 slaves; and Augustus put 20,000, of the same class, on board the corn ships. Though many laws were enacted by Augustus and other patriotic emperors, says the British *Encyclopædia*, to diminish the power of creditors over their insolvent debtors—though the influence of the mild spirit of Christianity tended much to meliorate the condition of slaves, even under Pagan masters, and though the emperor Hadrian made it capital to kill a slave without a just reason, yet this commerce prevailed for many ages, universally, in the empire, after the conversion of Constantine to the religion of Christ. It was not completely abolished even in the reign of Justinian; and in many countries, which had been once provinces of the empire, it continued long after the empire had fallen to pieces.

Among the ancient Germans, gamesters often became slaves from play, and slavery is said to have existed extensively, though in a mild form, according to Tacitus. In England, in the age of Alfred the Great, (tenth century,) purchases of men, horses, and oxen are mentioned in the same statute. In 1574, Queen Elizabeth issued a commission to inquire into the condition of her bond men and women in Cornwall, &c., with a view of compounding with them for their freedom. The

* Dr. Cartwright once told us, that one of the crimes denounced in the Bible is denominated by a term which means, literally, *slave stealing*, (abolitionists.) We forget in what connection the term is used; perhaps in reference to Tyre.

colliers and salters of Scotland were not manumitted until the close of the eighteenth century. These men could be transferred by written deed from proprietor to proprietor, and were in no respect privileged without such deed.

We have not mentioned Egypt, where Joseph was sold to slavery, and where, in that condition, the Israelites existed four hundred years. The Scythians established slavery throughout their northern wilds. Babylon, Tyre, and all the countries around Palestine, had slavery as one of their institutions. The "wrath of Achilles" was a quarrel about a slave. "In early Grecian republics, slavery seemed to be an indispensable element. The slave markets of Rome were filled with men of every complexion and every clime." After the conquest of the Normans, slaves were exported from England into Ireland, until the Irish themselves decreed their emancipation. On the Baltic, the Germans conducted the slave trade, and the Russians supplied slaves to Constantinople by way of the Dnieper. Even the word slave is derived from the Sclavonic tribes, who were reduced to slavery in their wars with the Germans. The Jews purchased slaves in France for the Saracens. The Arabians are said to have pawned their children to the Italian monarchs. The Venetians purchased slaves at Rome for the Arabs of Spain and Sicily. In the time of the crusades, three slaves were the price of a war horse. In the countless battles of the Moors and Christians, the captives were indiscriminately enslaved in the worst form. Christians regarded it a pious work, and the infidels retaliated through the pirates of Barbary.

On the discovery of America, the native Indians were imported into Spain as slaves. All the rivers of the country were penetrated for this commerce, which was effected through fraud and force. Even Columbus sent five hundred such slaves to be sold at Seville. This traffic is said to have continued two centuries. The New-Englanders enslaved the Pequods, the Waldrans and the Annon Indians, and they even sought Indian slaves from the southern provinces.* The colonists were supplied with white servants from England by a class of men called "spirits," who deluded them away and sold them in England, as well as in this country, under the hammer. The Scots taken in battle were sold to slavery, the royalist prisoners, and the Catholics of Ireland. The prisoners of Monmouth were eagerly sought as a merchantable commodity. Jeffries, the famous judge of James II., considered these prisoners as worth "ten or fifteen pounds apiece."†

In regard to African slavery, it appears first to have taken deep root in Africa itself, though it is clear, from modern researches, that this people were held in slavery by the Egyptians, as proved by their monuments. The Africans, at no period of history, were devoid of slavery among themselves. They traded slaves to the Tyrians and Carthaginians. Slavery, says the Encyclopedia, seems indeed to have prevailed through all Africa, from the very first peopling of that unexplored country; and we doubt if in any age of the world the unhappy negro was absolutely secure of his personal freedom, or even of not being sold to a foreign trader. The African princes were in the habit of destroying thousands of their prisoners, before an opportunity offered of selling them. The Guinea coast supplied the Arabs with slaves hundreds of years before the Portuguese embarked in the traffic. The Arabs of the desert have always been served by negro slaves. In 651, the king of Numidia promised an annual present of Ethiopian slaves to the Arabs of Egypt. Negro slaves were found in Greece, [Bancroft.] In 1100, they must have been uncommon in Europe, for we learn the crusaders burst into laughter on seeing some negroes in Asia, so comical was their appearance. It appears, however, the Portuguese, fifty years before the discovery of America, found the "trade in negro slaves, having curled hair," very profitable. The Spaniards vied with them in the trade at Seville. Isabella excepted the Moors or negroes of Africa, from the act emancipating the Indians of America.

Queen Elizabeth was so delighted with the success of John Hawkins's slave operations in America, that she became a partner in his monopoly, sharing his gains and protecting him in his worst enterprises.

The early history of slavery in the United States we have already given. (See Thornton, 26th and 27th pages, for the Quaker and Yankee participation in it.) The West India Company sent slaves to New-York by thousands. The Stuarts, and even Queen Anne, patronized the traffic. Amsterdam participated in its results in her corporate capacity. Pennsylvania maintained that it was "neither just nor convenient to emancipate her slaves," and Rhode Island, the greatest of all the slave traders, "doubted if slaves should be baptized, as then they might become free."

It is well known how the introduction of slavery was forced upon the south, and how long resisted. The northern country even declared that no person should own in the colonies land at all, unless he would purchase at least four negro slaves to every hundred acres!

* See Thornton's "Slavery," and the authorities there cited, p. 21.

† See the stirring but disgusting picture of the scene, when peers and dignitaries and favorites, male

and female, importuned the King for the privilege of disposing of these prisoners, and the success which attended them, in Macaulay's History of England.

NEGRO—NATURE AND DESTINY OF THE—

We are indebted to our friend, Dr. J. C. Nott, for a copy of his most interesting and instructive address, delivered before the Southern Rights' Association of that city, on the "Natural History of Man in connection with Negro Slavery."

Here we are in the year 1850, the owners of three millions of negro slaves, and *without any agency of ours*; the mother country and the original colonies bequeathed them to us. When the constitution was formed, this institution was recognized, and slave states entered the confederacy as equals, with constitutional guarantees for their property, and would have formed the copartnership on no other terms. All experience proves that the negroes cannot be emancipated without bringing want, misery, and barbarism upon them. It is clear, too, that these negroes cannot be liberated without destroying the prosperity, happiness, and political power of the southern states; and yet we are scoffed at and insulted, as outside barbarians, for perpetuating this institution, though no one has ever proposed a scheme by which these slaves can be emancipated with safety to the whites, and with benefit to them. Such conduct is unjust—is insulting, and not to be tolerated by men worthy of liberty.

Few persons realize the fact taught by history, that it is infinitely more difficult to *destroy*, or alter, great political or social institutions, than to *create* them.

The time of deliverance for the negro slaves, if a better destiny awaits them, has not yet come; nor will the Lord call forth a Moses from the ranks of the Searwards and George Thompsons. His chosen people were afflicted with much longer and more cruel bondage than have been our blacks, and had to abide the fulness of time.

Let us, on the other hand, take a glance at the history of African races. The population of that continent is estimated at a little short of one hundred millions, of which fifty-five millions are negro races; and yet, except in the Barbary States, Egypt, Abyssinia, Nubia, &c., which are populated by other races, not a monument, nor record, nor even a tradition exists, to mark the birth or death of civilization. This whole continent, south of the great Desert of Sahara, is a perfect blank in the world's history. The negro race were in close commercial intimacy with ancient Egypt and Carthage, in their palmiest days; they have continued their intercourse with Egypt and the Barbary States, down to the present day; they have had missionaries sent to them for centuries, and colonies established among them; in short, they have had every facility and every temptation held out which a people could ask, and still the first step towards civilization is not made. No negro race has ever yet invented an alphabet, however rude, or possessed the semblance of literature. What does all this mean? Can

any rational being believe that any time or efforts can civilize a people embracing so many millions, and who have resisted all external impulses for more than two thousand years!

A capital error—which has been received without reflection or investigation, and which has misled many of the most enlightened and zealous philanthropists of the past and present—is the idea that cultivation, through a series of generations, can expand the defective brains, develop the intellectual faculties of the negro races, and thus raise them, *by degrees*, to the full standard of excellence which belongs to the Caucasian races; that they can, in a word, be fully civilized, and fitted for self-government, in its highest and most complicated forms; that a black king, lords and commons could wield the mighty machinery of the British Empire! A greater delusion never entered the mind of a sane man; and how it ever got into vogue, with all history, all science, and all common sense against it, would be difficult to divine. Absurd religious opinions alone can explain.

Some of the aboriginal tribes of America, as the Toltecas, while isolated from all external aids, have achieved a semi-civilization. The Mongols, Hindoos, &c., under similar circumstances, have gone a step further; but the negroes, when left to themselves, have risen but little above the beasts of the field. No pure-blooded negro has ever risen above the grade of mediocrity in the whites. The notorious Toussaint Louverture, of Hayti, is the most remarkable negro in history; and though showing extraordinary powers for a negro, would have left no name as a white man, and was a brute in morals. He was unquestionably dark, but I have not been able to get any accurate information about his pedigree and precise race.

If, then, the negro races stand at the lowest point in the scale of human beings, and we know of no moral or physical agencies which can redeem them from their degradation, it is clear that they are incapable of self-government, and that any attempt to improve their condition is warring against an immutable law of nature.

This brings us to the great practical questions, What is to be the fate of the three millions of negro slaves now in our southern states? And what is to be *our* destiny, which is indissolubly linked with theirs! Here we have stood, with our arms folded, year after year, suffering aggression after aggression from the north, till the cordon is now drawn around us, and looking calmly at the growth of evils which ere long must inevitably end in bloodshed. There are appalling issues before us which must be met, and the results of which no human wisdom can foretell. The slaves double by natural increase every thirty years, and this ratio would give us fifty millions in little more than a century; a rapidity of in-

crease which no scheme of philanthropy ever yet proposed by emancipationists could keep pace with. The northern abolitionists are acting under the influence of ignorance and fanaticism, and there may, therefore, be some palliation for their offenses; but for us at the south, who are familiar with the black races, and know how impracticable all proposed schemes of emancipation are, there can be no excuse for our supineness. We could not educate the millions of slaves amongst us, for they would be unfit for slavery, and dangerous to us, while they would still be unfit for liberty. And admitting that cultivation could improve their intelligence, a century would be but a beginning in the work of regeneration. Many centuries would elapse, admitting its possibility, before the work could be completed; and it is expecting too much of human nature, to suppose that one race will sacrifice itself during so many generations, for the sole benefit of another.

Well, suppose the slaves to be educated as far as practicable, and prepared for emancipation, what then could be done with them? The free states are passing laws every where to protect themselves against the influx of free negroes, and very soon the barrier around us will be complete. It is clear that the three millions of slaves now at the south could not be turned loose upon us. Would a single man in Alabama vote to turn loose the three hundred thousand negroes within her borders, upon any terms which could be proposed?

It is evident, then, that if the negroes in the slave states are permitted to exist at all on this continent, it can be no where but in *slave states*, and no where but in *slavery*, with all their fearful increase. Can any one deny this assertion? The number which would escape to free states would be too small to affect materially the result; and the time is fast approaching when all free states will pass prohibitory laws against this population; for they know, as well as we do, that a large free negro population—which is an indolent, improvident, vicious, non-producing class—could not be tolerated. It is, therefore, evident, that we should have to provide for the evil at home, however incurable, or look to Liberia as a safety-valve.

It has been seriously suggested by some, and by Sir Charles Lyell amongst others, that the negroes should be gradually educated and emancipated at home, and allowed to amalgamate with the whites, and thus be absorbed, and become a part of our flesh and bone, and a part of our civilization. This proposition is not only insulting and revolting to us, but is overruled by other objections. There is no doubt that the intellectual grade of the negro races may be greatly improved by crossing them with the whites; but it must not be forgotten, on the other hand, that the white races would be *dragged down* by the adulteration,

and their civilization destroyed. We see now how difficult it is for the purest races of the earth to maintain any thing like rational governments; and what would become of our institutions in the hands of mulattoes? A great aim of philanthropy should be, to keep the ruling races of the world as pure and as wise as possible, for it is only through them that the others can be made prosperous and happy. Look at Hayti, where the mulatto caste governed feebly for a time. Their movement was constantly retrograde, until, finally dragged down by the pure blacks, they were exterminated or driven away. That beautiful island is now plunged into a perfectly savage state; and I am credibly informed, by an eyewitness, that he, on two occasions, saw the negroes roasting and eating Dominican prisoners on the roadside!

It being certain, then, (accumulating with the rapidity we have stated,) that the slaves of the southern states *must have* an outlet, at no very distant day, in some direction, let us revert to the proposed colonization in Africa. This is a scheme which has occupied the serious attention, and met with the full approval, of all the leading men of the north, and not a few of those at the south; and though fully convinced of its impracticability, I shall be glad to see the experiment now making with the free negroes fairly carried out, as I am convinced it will serve to prove the correctness of the views I have advanced.

It is utterly inconceivable to my mind how so many men of intelligence could be led to favor a scheme so impracticable, with the history of the two races open before them. There Africa stands with her fifty millions of blacks, and there she has stood for the last five thousand years, with this people occupying the same countries, without one step towards civilization; and all the experiments in the United States, the West Indies, &c., have failed. The boon has been presented to them in every possible shape, and they have never been able to grasp it. Is not the delusion the more extraordinary, when we see sensible men in this country and Europe fostering, with confident hopes, the republic of Liberia—while they laugh at the absurdity of the French nation, one of the most intellectual in the world, in attempting to make a republican, or any other rational form of government?

It is far from my feelings or design to misrepresent the facts connected with this scheme of colonization, for it has been approved by many of the wisest and best men of our country; but still I fear we have been grossly deceived, not only by bad, but by well-meaning men, at home, as well as in Africa. Letters and statements are published from Liberia; speeches are made before the Colonization Society in Washington, and published in the National Intelligencer, giving the most poetic

accounts of the intelligence, morality and refinement of the black colonists, and the rapid progress of civilization in Liberia. I have good reason to believe that these statements are utterly untrue, and a moment's reflection would bring any thinking man to the same conclusion. Can any one believe that such a change would come over four or five thousand ignorant, stupid, and, for the most part, vicious free negroes, in a few years! "The first settlement was made by free negroes from the United States, under the auspices of the American Colonization Society, in the year 1820," and this class *there* is the same as we see it around us *here*, every day; and we know full well the nature of the material on which these mighty changes are to be wrought. Some of them have made their way back to the United States in disgust, and contradict the statements given. A lamented friend, who died in Mobile a few years ago, (Dr. Mechlin,) and who lived in Liberia five years—a part of which time he was governor of that colony—told me that he regarded the experiment as a failure, and that he saw no hope of ever rendering the negro race fit for self-government; and no one who knew this gentleman ever doubted his honesty or intelligence.

The colony, so far, has only been held together by the fostering care of the Colonization Society, and support of foreign governments. It is governed too directly by the white agents of the society, and by the white blood coursing through the veins of the mulatto leaders amongst the colonists. President Roberts, who was once a blacksmith in Petersburg, Virginia, I am informed by those who knew him well, is three-fourths white blood, with florid complexion, red hair, and disagreeable expression of countenance. He is represented as "a keen, shrewd, designing fellow, who is turning matters in Liberia to his own account." Most of the other leading men are also mulattoes. The colonists have had many difficulties to contend with, but if the history of races teaches any thing, the delusion will probably not last much longer.

Slavery is already virtually abolished in the District of Columbia. In consequence of the incessant agitation in Congress, and the growth of the abolition party, this species of property has become insecure; and the slave-owners, from prudential motives, have been ridding themselves of their slaves, who are now reduced to but a handful. Even in Baltimore, by the census of 1840, out of twenty thousand negroes, there were but three thousand slaves, and this drain is going on in all the frontier slave states, while the slaves are emptied into the gulf states. Few realize the rapidity with which this process is going on. In Alabama, there were in 1820 but forty-one thousand slaves; in 1830, they had increased to one hundred and seventeen thou-

sand; in 1840, the number had reached two hundred and fifty-three thousand! and it remains to see what the census of 1850 will show. How long will it be before Alabama must pass and enforce laws against the further introduction of slaves! The slaves double in thirty years, by natural increase, and, with the immigration, our children will see around them in this short period at least one million. All the cotton and sugar states will be in the same crowded condition, and each will be passing laws for its own protection. Kentucky is already agitating the question of abolition within her own borders, and it requires no prophet's eye to see that emancipation is inevitable in all the farming states where white labor can be advantageously used.

These reflections afford ample field for sober consideration. What disposition God, in his providence, will eventually make of these blacks, cannot be foretold; but it is our duty to provide for our own happiness and theirs, as long as we can. In dealing with this question, it will not do to be guided by abstract notions of liberty and slavery. We can only judge the future by the past; and as experience proves that the negro is better off in slavery at the south than in freedom elsewhere, it is the part of philanthropy to keep him here, as we keep our children in subjection for their own good.

NEGRO SLAVERY.—DECLINE OF NORTHERN AND GROWTH OF SOUTHERN SLAVERY.—We have on one or two occasions spoken of the essay by E. B. Bryan, of Charleston, entitled "The Rightful Remedy," addressed to the Slaveholders of the South. The author has condensed a great deal of valuable information upon the subject of slavery, considered in almost every point of view, and upon a great many collateral topics. We deem the publication of such documents highly valuable in enabling us to give a reason for our faith, and we think, in particular, that the labors of Mr. Bryan deserve high appreciation.

"The importation of negroes into the British American colonies commenced during the reign of Queen Elizabeth, under the immediate supervision of Sir John Hawkins. During the succeeding reigns of James 1st, Charles 1st and 2d, the slave trade in the British colonies steadily and rapidly increased; and Great Britain far outstripped any other nation in the world, in the extent to which she carried the trade.

In the year 1793, Great Britain imported more than half the number of slaves imported by all the European powers put together. From the year 1700 to 1786, the number of slaves imported by British subjects into the island of Jamaica alone, was *six hundred and ten thousand*; or about seven thousand one hundred every year. In the year 1771, *forty-seven thousand one hundred forty-six* negroes

were imported into the British colonies, in British ships alone.

Is it not difficult to believe that Great Britain, who so short a time ago was the most extensive and cruel slave-trader in the world, is the same Great Britain who is now the greatest suppressor of that very trade! The entire number of negroes said to have been enslaved (that is, transported and landed in the British colonies, for those who died on the voyage across the Atlantic are not included) by Great Britain, is over *three millions*.

For the great majority of negroes now in the United States, English traders are to be thanked. Let us, therefore, before we utter our thanks, examine our affairs, and see to what extent these thanks are due.

The census of 1790 affords us the earliest information as to the number of negroes in the country at the close of the revolution; and though there will be error, yet the error will not be very material, if we adopt that census as indicating the true number in the states at the close of the war.

The population of the free states was then as follows: Whites, 1,852,116. Free colored, 29,435. Slaves, 49,257.

The population of the slaveholding states was: Whites, 1,201,351. Free colored and Indians, 28,265. Slaves, 646,188.

In Vermont there were 85,268 whites, 255 free colored, and 16 slaves.

In New-Hampshire there were 141,197 whites, 680 free colored, and 158 slaves.

In Massachusetts, the negro trade had been prohibited in 1778, and there was not a slave (that is, a negro bondman) in the state. There were 373,324 whites, and 5,463 free negroes. In this, as in other New-England states, there was comparatively little necessity, and less profit, for the peculiar labor to which the African disposition is adapted, viz. agriculture on a large scale; for the negro is dissatisfied on a farm, his predilection is decidedly for the large plantation, on which reside fifty or a hundred of his associates: he there has every facility for that merry and blithesome intercourse, the love of which is a striking characteristic of the race; whereas the lonesome life he would lead on a small New-England farm would be distressing to him. The climate of these states is against the health and comfort of the negro; his native home is under a tropical sun, and notwithstanding he can endure, without serious inconvenience, the extreme degree of heat incident to such a climate as Africa's, he is utterly averse to the frigid blasts of winter. There not being any means by which money could be made in these states, through the medium of slave labor within their limits, is the chief cause of its never having been resorted to on a larger scale.

In Rhode Island the slave-trade was always extensively carried on until prohibited by law.

The rum distilled in the West Indies was carried to Africa to purchase negroes, and the negroes purchased in Africa were carried to the West Indies to purchase rum; this profitable trade was continued, by those interested in it, to the latest possible period. It was the source of wealth to many of the people of Newport. The population of this state was 64,470 whites, 3,407 free negroes, and 948 slaves.

In Connecticut there were 232,374 whites, 2,810 free negroes, and 2,764 slaves.

In New-York there were 314,142 whites, 4,654 free negroes, and 21,324 slaves.

In New-Jersey there were 170,954 whites, 1,762 free negroes, and 11,423 slaves. For about six or eight years previous to 1790, there had been a remarkable increase in the number of slaves, and an equally remarkable decrease in the number of free negroes. But for a space of over forty-five years, it is to be observed that the increase of the black population (including both slave and free) was at the same rate as that of the white population. At this time the principal pursuit of the people of New-Jersey was agriculture, and that on a small scale; a kind of farming not calculated to enhance slave labor, though perhaps able to support it. And it is said by a writer, who travelled all over North America and the West Indies, when preparing his history, that agriculture (in this state) had not been improved to that degree which, from long experience, we might rationally expect, and which the fertility of the soil, in many places, certainly encouraged. Evincing either a want of enterprise on the part of proprietors, or a fault in the system of labor; the latter cause is, perhaps, that which may most reasonably be assigned, for no one can doubt the energy and enterprise of the people of New-Jersey. This is a good instance of the unprofitableness and misapplication of slave labor in the northern states.

In Pennsylvania there were 424,079 whites, 6,557 free negroes, and 3,708 slaves.

In Delaware, which is more assimilated in climate and natural resources with Maryland and Virginia than any other state, lying, as it does, in the same latitude, and possessing similar natural features, we find a greater proportion of slaves than in any state north of it. There were 46,308 whites, 3,899 free negroes, and 8,887 slaves. This is the last of the free states which then held slaves.

Since that census was taken, all the 45,371 slaves held in these states have disappeared, and the current which swept them away has borne along with it we cannot tell how many times that number from the southern states, through the agency of those good abolition gentlemen, who never fail to let "charity, in golden links of love, connect them with the brotherhood of man;" the essence of which golden links of love is the golden rule, "rob

Peter to pay Paul," or rob white to pay black. In all these states the white population has regularly and rapidly increased; but the negroes, where are they? Some have been sent to their fatherland, Liberia, to set up a model republic, and to enlighten and amend the civil code of Ethiopia. Some have gone the way of all flesh, through sheer want of that same thing, wherewith they might have been nourished and kept alive but for want of it. Some have emigrated westward, and the glory of their enlightened minds has shed lustre on the name of Ohio. Some choice spirits among them are the pride and boast of divers northern penitentiaries and almshouses. And some remain, the sportive imps of fun and frolic, in the large cities of the north, and have their annual and semi-annual exhibitions, for the benefit of their gaping brethren of a paler hue, of the spontaneous effervescence of the spirit of liberty fresh from their American bosoms. And for the rest, they are among the most influential and respectable citizens of the northern community.

In Maryland there were 208,649 whites, 8,043 free negroes and Indians, and 108,086 slaves.

In Virginia there were 442,117 whites, 12,866 free negroes and Indians, and 292,627 slaves. It must be remarked here, that the increase of the slave population of Virginia, for fourteen years preceding this census, was less than it had been for a century before; owing to the fact, that about 30,000 slaves died of the small-pox or camp-fever, caught from the British army; or were inveigled off, while Lord Cornwallis was roving over the state.

In Kentucky, then in its infancy, there were 61,133 whites, 114 free negroes, and 12,430 slaves.

In North Carolina there were 288,205 whites, 4,975 free negroes and Indians, and 100,571 slaves.

In Tennessee there were 5,813 whites, and 1,161 slaves.

In South Carolina there were comparatively more slaves than in any other state; the population being 140,278 whites, and 107,094 slaves. A great loss in slave property was incurred by this state during the revolutionary war, and was, comparatively speaking, about three times as great as that met with by Virginia. During the three years the British were in possession of Charleston, they stole away and sold in the West Indies no less than 25,000 negroes.

In Georgia there were 55,156 whites, and 29,284 slaves. The circumstances connected with slavery in the early settlement of this state, present a striking contrast with those of Massachusetts and other New-England states; in these latter slavery was originally introduced and considerably practised, but, as

the population increased, hired labor took the place of slave labor. In Georgia, exactly the reverse was the case. The original "Board of Trustees for the settling and establishing the colony of Georgia," consisting of twenty-one opulent and humane gentlemen in England, prohibited the use of negroes in the colony, and the importation of rum. By this one ruthless stroke of philanthropy, the settlers of Georgia were deprived of the twofold blessings enjoyed by their more fortunate neighbors of Rhode Island: they could accumulate wealth by trading in Africans and rum. But Georgia was designed for a free state, and Africans were not to be used, neither rum. This was about the year 1732. The plan was a theoretical one, and was, perhaps, the worst that could have been adopted; it was certainly productive of the most pernicious consequences to the prosperity of the colony. The paramount object of the trustees being to raise silk and wine, they deemed it inexpedient to introduce slave labor. And, in addition to this, the colony being at this early period a kind of barrier between Carolina on the one side, and the Spanish settlement and St. Augustine on the other, the trustees fell into the very general, though equally erroneous belief, that negroes would rather weaken than strengthen its defensive powers. These were the chief reasons why the settlers were prohibited from employing slaves; but the absurd restriction had a visible effect. It was found impracticable in such a climate, and without African labor, for the colony to flourish; the enterprise, therefore, proved a failure. In a country so rich, with a climate so favorable, and a soil so productive as that of Georgia, the colonists, nevertheless, gradually disappeared, and effectually deserted the enterprise; because they were convinced they could never succeed under such impolitic restrictions.

The trustees, finding that the colony was languishing under their transatlantic care, resigned their charter, in the year 1752, to the king of England, and the deserted colony became a royal government. History informs us that at this time "the vestiges of cultivation were scarcely perceptible in the forests, and in England all commerce with the colony was neglected." But, immediately on the government being changed, the people became possessed of the same privileges which their neighbors enjoyed; prominent among which was the privilege of cultivating their rich lands by the only profitable means, which is no other than slave labor. Several years elapsed, however, before the value of the lands became generally appreciated. And about the year 1760 a spirit of enterprise sprung up, which has ever since been a characteristic of this state. And it should be particularly observed, that no portion of the population,

under the new laws, increased so rapidly, and no system of labor became so generally disseminated, as that of the African slave.

The experiment has, therefore, we think, been fairly tried; both north and south have had ample opportunities to discover the interest and policy of their respective sections. All the New-England states have tried slave labor, but it was not found profitable, and was abandoned. In the south, the state of Georgia was, for a period of twenty years, not a free, but decidedly a *white* colony. White labor was found here to be incompatible with the climate; slave labor was introduced; and, in the short space of thirty years, nearly thirty thousand slaves were actively employed in the pursuits of agriculture. And, at the present day, slaveholding Georgia will favorably compare with any state in the Union."

NEGRO POPULATION.—REMEDY FOR ITS EXCESS AT THE SOUTH.—What shall we do to remedy the evils of an excessive slave population, is the question that we propose now to consider. The number of slaves in the United States was 697,897 in 1790, and in 1850 it was 3,179,589, showing an increase of 2,481,692 since 1790. From 1830 to 1840 the annual increase of slaves was 47,881, and from 1840 to 1850 it was 69,223, and from 1850 to 1860 it will probably be as much as 80,000. The number of slaves in the United States, in 1820, was 1,538,128, which is about half the amount of the present slave population. It thus appears that the slave population of this country has been doubled within the last thirty years. The increase of slaves within the last ten years was 692,284, and it is probable the increase will be 800,000 during the next ten years. In 1860, the slaves will be about 4,000,000. At the end of the next thirty years it will be about six millions and a half, and at the commencement of the next century it will not fall far short of thirteen millions. This is a state of things which must inevitably come, unless there should be some unforeseen and unexpected occurrences to prevent it. It may be a remote, but it is a sure result. In this view of the case, we are led to inquire, with a feeling of deep interest, what is to become of this rapidly increasing population? Can they be profitably employed in agriculture, and will we have a sufficiency of land for them to cultivate? Some may hope that we will find an outlet for our slaves in territories now unoccupied by slaves, and where there are but few inhabitants. It has been a favorite idea with some of our statesmen to acquire territory in which our slave institutions will exist, and thus preserve us from the dangers of a redundant slave population. Whatever hope may have once been entertained that this was a feasible scheme, has, we think, been dissipated by the occurrences of the past four years. We

should look at things as they really exist, and not permit ourselves to be deluded with false hopes which are never to be realized. We must be aware of the approach of danger before we will take the necessary steps to guard against it. We must in all candor say, that we think the limits of slave territory are fixed. California, New-Mexico, and Utah are, we think, already closed against the institution of slavery, and any other territories which we may acquire will share the same fate. The south has been excluded from an equal participation in the enjoyment of the territories recently obtained from the Mexican republic, whether properly or improperly, justly or unjustly, constitutionally or unconstitutionally, it is not our purpose now to inquire. We only wish to deal with facts as they exist, without undertaking to determine how this state of things was brought about, and who are responsible. That it is the interest of the northern people to favor the extension of slavery we entertain not a doubt; and in attempting to confine it within its present limits, they are aiming a fatal blow at their own prosperity, if the southern people will now adopt that line of policy which their duties and their interests alike demand. The introduction of slavery into territories where it now does not exist, would benefit the north by furnishing a greater quantity of those raw materials which the north so much needs for manufacturing purposes, by opening new markets for the sale of northern fabrics, and by enlarging the commerce of the northern ship-owners. If, however, slavery is confined within its present limits, the rapid increase in the number of slaves will compel the southern people to employ their slaves in the manufacture of such articles as are now made almost exclusively in the northern states. In this way the slave labor of the south will, instead of contributing to the wealth of the north, as it has heretofore done, become the successful competitor of northern white labor in those departments of industry of which the north has in times past enjoyed a monopoly. We will be compelled to use the surplus black population, which is likely to accumulate upon our hands, in cotton and woollen factories, in iron furnaces, and in all those pursuits which now furnish employment to so large a portion of the northern people. Although at this time the white labor of the north may be somewhat cheaper for manufacturing purposes than slave labor, on account of the comparative scarcity of slave labor and the value of the agricultural products chiefly raised by it, yet when the number of slaves is doubled or tripled, and they are confined within their present limits, the real or fancied advantages which the north enjoys from cheap labor will no longer exist. When this takes place, the southern people will be forced to resort to employments for their slaves other

than those in which they are now engaged, which are mostly agricultural. Not only will a large portion of the cotton raised in the south be manufactured in the south, but many of those extensive establishments of mechanical industry at the north, which depend upon the south for their patronage, yea, for their very existence, will be transferred to the south, and we will not then be dependent on the north for the articles of clothing we and our slaves use. If we knew the amount of money annually taken from us to purchase articles of negro clothing, including hats, boots, shoes, blankets, &c., we would be startled. Why is this, and how long will it continue? If the people of the north are not willing for us to take our slaves to the new territories, we must, in self-defense, bring the slave labor of the south into competition with the free white labor of the north. What is to be the result when the northern people lose their southern trade; when they find the manufacture of cotton and woollen fabrics transferred to the south, and all their mechanics, who obtain a livelihood by making articles for the southern market, thrown out of employment, we do not pretend to conjecture; but be it what it may, it will be the fruit of northern opposition to the institution of slavery and to its extension. Will we be able, it may be asked, to find a market for our fabrics, if we manufacture all or a considerable portion of the cotton raised in the southern states? Most assuredly we can. We will have for our market-place the whole habitable globe, and all the people of the earth will be our customers. We can give our manufactures in exchange for the teas and silks of Asia, the sugar and coffee of the West Indies, the palm oil, dye stuffs, ivory and gold of Africa; and, in a word, for any thing which any other people have to sell, because cotton, on account of its cheapness, its durability, and its comfort, is destined to be the clothing for mankind. We have now seen that the south is not dependent upon the north for any thing, except so far as she chooses to make herself so; and that the north is dependent upon the south for her existence, as a commercial and manufacturing people. Ought not this to teach the north to beware lest she carry her aggressions to that point where resistance will become the first and highest duty of the south? One of the most obvious remedies against an excessive slave population, is to employ a considerable portion of that kind of labor in the construction of plank roads, turnpike roads, and railroads in the southern states. Let us suppose that one fourth of the labor now engaged in raising cotton should be thus directed; the amount of the cotton crop would be diminished one fourth, and the increased price consequent thereon would make up for the diminished quantity, and would

enable the cotton growers to realize as much money as if the one fourth of the labor had not been turned into other channels. Suppose again, that another fourth should be employed in factories of different kinds; this would cause a further diminution in the quantity raised, and a corresponding increase in the price. Should the cotton crop of the United States be reduced to 1,500,000 bales per annum, of which one third would be consumed in the southern states, it is easy to see what a fatal effect it would have upon the manufacturers of the northern states and of Europe. The result would be their utter prostration. We have supposed this, which may seem an extreme case, to show that the northern states, and Europe also, are in the power of the cotton growers of the south. A withdrawal of the cotton of the United States from England would produce an instant and terrible revolution in that island; and to cut off from the northern states of this confederacy their southern trade would destroy their merchants and manufacturers, cause a failure of their banks, and bring about a financial crisis such as they have never experienced, and of which their imagination can scarcely conceive. The amount of cotton consumed in the northern states during the last five years has been 2,360,645 bales, or an average per annum of 473,931 bales. The value of the cotton consumed during the last five years in the northern states has been \$38,637,049, or an average of \$17,727,409 per annum. The profits arising from the manufacture of this cotton, and selling it to the northern people, amounted to perhaps double the cost of the raw material, whilst it furnished employment to thousands of operatives, and secured to the northern farmer a market for his produce. Surely, then, the north can have nothing to hope from a disruption of this confederacy, which many of its people seem to be striving so hard to bring about. The remedies then which we propose, to prevent the evils of a redundant slave population, are *the employment of slave labor in the construction of railroads throughout the southern states, and the use of negroes in our factories and in our workshops.* In this way we can build all the important roads in the southern states without taking any thing of consequence from the available means of our people, and we can obtain those articles of taste and elegance which we now rely upon the north to furnish us, made at our own doors. We must bring slave labor directly in competition with northern labor. We must continue to seek out and find new fields for slave labor, whenever it ceases to be profitable in agriculture. These are the measures which we are bound by the highest obligations to adopt, to ward off the alarming evils of a rapidly and fearfully increasing slave population, confined as we

think it will be within its present limits, unless there is a great change in the political condition of the country.

NEGROES.—DISEASES AND PECULIARITIES OF THE NEGRO. BY DR. CARTWRIGHT, OF NEW-ORLEANS.—Although the African race constitutes nearly a moiety of our southern population, it has not been made the subject of much scientific investigation, and is almost entirely unnoticed in medical books and schools. It is only very lately that it has, in large masses, dwelt in juxtaposition with science and mental progress. On the Niger, and in the wilds of Africa, it has existed for thousands of years, excluded from the observation of the scientific world. It is only since the revival of learning that the people of that race have been introduced on this continent. They are located in those parts of it not prolific in books and medical authors. No medical school was ever established near them until a few years ago; hence, their diseases and physical peculiarities are almost unknown to the learned. The little knowledge that southern physicians have acquired concerning them has not been derived from books or medical lectures, but from facts learned from their own observation in the field of experience, or picked up here and there from others.

Before going into the peculiarities of their diseases, it is necessary to glance at the anatomical and physiological differences between the negro and the white man; otherwise, their diseases cannot be understood. It is commonly taken for granted that the color of the skin constitutes the main and essential difference between the black and the white race; but there are other differences more deep, durable and indelible, in their anatomy and physiology, than that of mere color. In the albino the skin is white, yet the organization is that of the negro. Besides, it is not only in the skin that a difference of color exists between the negro and the white man, but in the membranes, the muscles, the tendons, and in all the fluids and secretions. Even the negro's brain and nerves, the chyle and all the humors, are tintured with a shade of the pervading darkness. His bile is of a deeper color, and his blood is blacker than the white man's. There is the same difference in the flesh of the white and black man, in regard to color, that exists between the flesh of the rabbit and the hare. His bones are whiter and harder than those of the white race, owing to their containing more phosphate of lime and less gelatina. His head is hung on the atlas differently from the white man; the face is thrown more upwards, and the neck is shorter and less oblique; the spine more inwards, and the pelvis more obliquely outwards; the thigh-bones larger, and flattened from before backwards; the bones more bent;

the legs curved outwards, or bowed; the feet flat; the gastrocnemii muscles so long, as to make the ankle appear as if planted in the middle of the foot; the gait, hopper-hipped, or what the French call *Fallure dehanche*, not unlike that of a person carrying a burden. The projecting mouth, the retreating forehead, the broad, flat nose, thick lips and woolly hair, are peculiarities that strike every beholder. According to Sæmmerring and other anatomists, who have dissected the negro, his brain is a ninth or tenth less than in other races of men, his facial angle smaller, and all the nerves going from the brain, as also the ganglionic system of nerves, are larger in proportion than in the white man. The nerves distributed to the muscles are an exception, being smaller than in the white race. Sæmmerring remarks, that the negro's brain has in a great measure run into nerves. One of the most striking differences is found in the much greater size of the *foramen magnum* in the negro than the white man. The foramen, or orifice between the brain and the spinal marrow, is not only larger, but the medulla oblongata, and particularly the nerves supplying the abdominal and pelvic viscera. Although the nose is flat, the turbinated bones are more developed, and the pituitary membrane, lining the internal cavities of the nose, more extensive than in the white man, and causing the sense of smell to be more acute. The negro's hearing is better, his sight is stronger, and he seldom needs spectacles.

The field of vision is not so large in the negro's eye as in the white man's. He bears the rays of the sun better, because he is provided with an anatomical peculiarity in the inner canthus, contracting the field of vision, and excluding the sun's rays; something like the *membrana nictitans*, formed by a preternatural development of the *plica lunaris*, like that which is observed in apes. His imitative powers are very great, and he can agitate every part of the body at the same time, or what he calls *dancing all over*. From the diffusion of brain, as it were, into the various organs of the body, in the shape of nerves to minister to the senses, every thing, from the necessity of such a conformation, partakes of sensuality, at the expense of intellectuality. Thus, music is a mere sensual pleasure with the negro. There is nothing in his music addressing the understanding; it has melody, but no harmony; his songs are mere sounds, without sense or meaning—pleasing the ear, without conveying a single idea to the mind; his ear is gratified by sound, as his stomach is by food. The great development of the nervous system, and the profuse distribution of nervous matter to the stomach, liver and genital organs, would make the Ethiopian race entirely unmanageable, if it were not that this excessive nervous development is associated with a deficiency of red

blood in the pulmonary and arterial systems, from a defective atmospherization or arterialization of the blood in the lungs—constituting the best type of what is called the lymphatic temperament, in which lymph, phlegma, mucus, and other humors predominate over the red blood. It is this defective hematosis, or atmospherization of the blood, conjoined with a deficiency of cerebral matter in the cranium, and an excess of nervous matter distributed to the organs of sensation and assimilation, that is the true cause of that debasement of mind which has rendered the people of Africa unable to take care of themselves. It is the true cause of their indolence and apathy, and why they have chosen, through countless ages, idleness, misery and barbarism, to industry and frugality; why social industry, or associated labor, so essential to all progress in civilization and improvement, has never made any progress among them, or the arts and sciences taken root on any portion of African soil inhabited by them; as is proved by the fact that no letters, or even hieroglyphics—no buildings, roads or improvements, or monuments of any kind, are any where found, to indicate that they have ever been awakened from their apathy and sleepy indolence, to physical or mental exertion. To the same physiological causes, deeply rooted in the organization, we must look for an explanation of the strange facts, why none of the languages of the native tribes of Africa, as proved by ethnographical researches, have risen above common names, standing for things and actions, to abstract terms or generalizations; why no form of government on abstract principles, with divisions of power into separate departments, has ever been instituted by them; why they have always preferred, as more congenial to their nature, a government combining the legislative, judicial and executive powers in the same individual, in the person of a petty king, a chieftain, or master; why, in America, if let alone, they always prefer the same kind of government, which we call slavery, but which is actually an improvement on the government of their forefathers, as it gives them more tranquillity and sensual enjoyment, expands the mind and improves the morals, by arousing them from that natural indolence so fatal to mental and moral progress. Even if they did not prefer slavery, tranquillity and sensual enjoyment, to liberty, yet their organization of mind is such, that if they had their liberty, they have not the industry, the moral virtue, the courage and vigilance to maintain it, but would relapse into barbarism, or into slavery, as they have done in Hayti. The reason of this is founded in unalterable physiological laws. Under the compulsive power of the white man, they are made to labor or exercise, which makes the lungs perform the duty of vitalizing the blood more perfectly than

is done when they are left free to indulge in idleness. It is the red, vital blood, sent to the brain, that liberates their mind when under the white man's control; and it is the want of a sufficiency of red, vital blood, that chains their mind to ignorance and barbarism when in freedom.

The excess of organic nervous matter, and the deficiency of cerebral—the predominance of the humors over the red blood, from defective atmospherization of the blood in the lungs, impart to the negro a nature not unlike that of a new-born infant of the white race. In children, the nervous system predominates, and the temperament is lymphatic. The liver, and the rest of the glandular system, are out of proportion to the sanguineous and respiratory systems, the white fluids predominating over the red; the lungs consume less oxygen, and the liver separates more carbon than in the adult age. This constitution, so well marked in infancy, is the type of the Ethiopian constitution, of all ages and sexes. It is well known, that in infancy, full and free respiration of pure fresh air in repose, so far from being required, is hurtful and prejudicial. Half smothered by its mother's bosom, or the cold external air carefully excluded by a warm room or external covering over the face, the infant reposes; re-breathing its own breath, warmed to the same temperature as that of its body, and loaded with carbonic acid and aqueous vapor. The natural effect of this kind of respiration is, imperfect atmospherization of the blood in the lungs, and a debetade of intellect, from the defective vitalization of the blood distributed to the brain. But it has heretofore escaped the attention of the scientific world, that the defective atmospherization of the blood, known to occur during sleep in infancy, and to be the most congenial to their constitution, is the identical kind of respiration most congenial to the negro constitution, of all ages and sexes, when in repose. This is proved by the fact of the universal practice among them of covering their heads and faces during sleep, with a blanket, or any kind of covering that they can get hold of. If they have only a part of a blanket, they will cover their faces when about to go to sleep. If they have no covering, they will throw their hands or arms across the mouth and nose, and turn on their faces, as if with an instinctive design to obstruct the entrance of the free external air into the lungs during sleep. As is the case with infants, the air that negroes breathe, with their faces thus smothered with blankets or other covering, is not so much the external air as their own breath, warmed to the same temperature as that of their bodies, by confinement and re-inspiration. This instinctive and universal method of breathing, during sleep, proves the similarity of organization and physiological laws existing between negroes and infants, as

far as the important function of respiration is concerned. Both are alike in re-breathing their own breath, and in requiring it to be warmed to their own temperature, by confinement which would be insupportable to the white race after passing the age of infancy. The inevitable effect of breathing a heated air, loaded with carbonic acid and aqueous vapor, is defective hematosis and hebetude of intellect.

Negroes, moreover, resemble children in the activity of the liver and in their strong assimilating powers, and in the predominance of the other systems over the sanguineous; hence they are difficult to bleed, owing to the smallness of their veins. On cording the arm of the stoutest negro, the veins will be found scarcely as large as a white boy's of ten years of age. They are liable to all the convulsive diseases, cramps, spasms, colics, etc., that children are so subject to.

Although their skin is very thick, it is as sensitive, when they are in perfect health, as that of children, and like them they fear the rod. They resemble children in another very important particular: they are very easily governed by love combined with fear, and are ungovernable, vicious and rude under any form of government whatever, not resting on love and fear as a basis. Like children, it is not necessary that they be kept under the fear of the lash; it is sufficient that they be kept under the fear of offending those who have authority over them. Like children, they are constrained, by unalterable physiological laws, to love those in authority over them, who minister to their wants and immediate necessities, and are not cruel or unmerciful. The defective hematosis, in both cases, and the want of courage and energy of mind as a consequence thereof, produces in both an instinctive feeling of dependence on others, to direct them and to take care of them. Hence, from a law of his nature, the negro can no more help loving a kind master, than the child can help loving her who gives it suck.

Like children, they require government in every thing; food, clothing, exercise, sleep—all require to be prescribed by rule, or they will run into excesses. Like children, they are apt to over-eat themselves, or to confine their diet too much to one favorite article, unless restrained from doing so. They often gorge themselves with fat meat, as children do with sugar.

One of the greatest mysteries to those unacquainted with the negro character, is the facility with which an hundred, even two or three hundred, able-bodied and vigorous negroes are kept in subjection by one white man, who sleeps in perfect security among them, generally, in warm weather, with doors and windows open, with all his people, called slaves, at large around him. But a still greater

mystery is the undoubted fact of the love they bear to their masters, similar in all respects to the love that children bear to their parents, which nothing but severity or cruelty in either case can alienate. The physiological laws, on which this instinctive and most mysterious love is founded in the one case, are applicable to the other. Like children, when well-behaved and disposed to do their duty, it is not the arbitrary authority over them that they dread, but the petty tyranny and imposition of one another. The overseer among them, like the school-master among children, has only to be impartial, and to preserve order by strict justice to all, to gain their good-will and affections, and to be viewed not as an object of terror, but as a friend and protector to quiet their fears of one another.

There is a difference between infant negroes and infant white children: the former are born with heads like gourds, the fontanelles being nearly closed, and the sutures between the various bones of the head united—not open and permitting of overlapping, as in white children. There is no necessity for the overlapping of the bones of the head in infant negroes, as they are smaller, and the pelvis of their mothers larger than in the white race. All negroes are not equally black; the blacker, the healthier and stronger; any deviation from the black color, in the pure race, is a mark of feebleness or ill-health. When heated from exercise, the negro's skin is covered with an oily exudation that gives a dark color to white linen, and has a very strong odor. The odor is strongest in the most robust; children and the aged have very little of it.

I have thus hastily and imperfectly noticed some of the more striking anatomical and physiological peculiarities of the negro race. The question may be asked: Does he belong to the same race as the white man? Is he a son of Adam? Does his peculiar physical conformation stand in opposition to the Bible, or does it prove its truth? These are important questions, both in a medical, historical, and theological point of view. They can better be answered by a comparison of the facts derived from anatomy, physiology, history and theology, to see if they sustain one another. We learn from the book of Genesis that Noah had three sons, Shem, Ham, and Japheth, and that Canaan, the son of Ham, was doomed to be servant of servants unto his brethren. From history we learn, that the descendants of Canaan settled in Africa, and are the present Ethiopians, or black race of men; that Shem occupied Asia, and Japheth the north of Europe. In the 9th chapter and 27th verse of Genesis, one of the most authentic books of the Bible, is this remarkable prophecy: "God shall enlarge Japheth, and he shall dwell in the tents of Shem; and Canaan shall be his servant." Japheth has been greatly enlarged by the discovery of a new world, the

continent of America. He found in it the Indians, whom natural history declares to be of Asiatic origin, in other words, the descendants of Shem; he drove out Shem, and occupied his tents; and now the remaining part of the prophecy is in the process of fulfilment, from the facts everywhere before us, of Canaan having become his servant. The question arises, is the Canaanite, or Ethiopian, qualified for the trying duties of servitude, and unfitted for the enjoyment of freedom? If he be, there is both wisdom, mercy and justice in the decree dooming him to be servant of servants, as the decree is in conformity to his nature. Anatomy and physiology have been interrogated, and the response is, that the Ethiopian or Canaanite is unfitted, from his organization and the physiological laws predicated on that organization, for the responsible duties of a free man, but, like the child, is only fitted for a state of dependence and subordination. When history is interrogated, the response is, that the only government under which the negro has made any improvement in mind, morals, religion, and the only government under which he has led a happy, quiet and contented life, is that under which he is subjected to the arbitrary power of Japheth, in obedience to the Divine decree. When the original Hebrew of the Bible is interrogated, we find, in the significant meaning of the original name of the negro, the identical fact set forth, which the knife of the anatomist at the dissecting-table has made appear; as if the revelations of anatomy, physiology and history were a mere re-writing of what Moses wrote. In the Hebrew word "Canaan," the original name of the Ethiopian, the word *slave by nature*, or language to the same effect, is written by the inspired penman. Hence there is no conflict between the revelations of the science of medicine, history, and the inductions drawn from the Baconian philosophy and the authority of the Bible; one supports the other.

As an illustration, it is known that all the Hebrew names are derived from verbs, and are significant. The Hebrew verb *Canah*, from which the original name of the negro is derived, literally means to *submit himself—to bend the knee*. Gesenius, the best Hebrew scholar of modern times, renders both the Kal, Hiphil and Niphal form of the verb from which Canaan, the original name of the negro, is derived, in the following Latin: *Genu flexit*—he bends the knee; *in genua procidit*—he falls on his knees; *depressus est animus*—his mind is depressed; *submisit se gessit*—he departs himself submissively; *fractus est*—he is crouched or broken; or in other words, *slave by nature*, the same thing which anatomy, physiology, history, and the inductions drawn from philosophical observations, prove him to be.

A knowledge of the great primary truth,

that the negro is a slave by nature, and can never be happy, industrious, moral, or religious, in any other condition than the one he was intended to fill, is of great importance to the theologian and statesman, and to all those who are at heart seeking to promote his temporal and future welfare. This great truth, if better known and understood, would go far to prevent the East India Company and British government from indulging any expectation of seeing their immense possessions in Asia enhanced in value by the overthrow of slave-labor in America, through the instrumentality of northern fanaticism; or of seeing the Union divided into two or more factions hostile to each other; or of gaining any advantages that civil commotion on this side of the Atlantic would give to the tottering monarchies of Europe. With the subject under this aspect, the science of medicine has nothing to do, further than to uncover its light—to show truth from error.

PULMONARY CONGESTIONS, PNEUMONIA, &c.—One of the most formidable complaints among negroes, more fatal than any other, is congestion of the lungs; or what European writers would call false pleurisy, or peripneumonia notha. It is often called cold plague, typhus pneumonia, bilious pleurisy, &c., according to its particular type and the circumstances attending it; sometimes the head complains more than any other part, and it then bears the misnomer, "head pleurisy." It occurs, mostly, in winter and spring, but is met with at every season of the year, when cold nights succeed to warm days. It is more common among those who sleep in open houses, without sufficient fires to keep them warm and comfortable. It is seldom observed among negroes who inhabit log cabins, with cemented or clay floors, or warm houses made of brick, or any material to exclude the cold wind and air. The frame houses, with open weather-boarding and loose floors, admitting air both at the sides and from below, are buildings formed in ignorance of the peculiar physiological laws of the negro's organization, and are the fruitful sources of many of his most dangerous diseases.

Want of sufficient fires and warm blankets is also another cause of thoracic complaints. The negro's lungs, except when the body is warmed by exercise, are very sensitive to the impressions of cold air. When not working or taking exercise, they always crowd around a fire, even in comparatively warm weather, and seem to take a positive pleasure in breathing heated air and warm smoke. In cold weather, instead of sleeping with their feet to the fire, as all other kinds of people do, whether civilized or savage, they turn their head to the fire—evidently for the satisfaction of inhaling warm air, as congenial to their lungs, in repose, as it is to infants. In bed, when disposing themselves for sleep, the

young and old, male and female, instinctively cover their heads and faces, as if to insure the inhalation of warm, impure air, loaded with carbonic acid and aqueous vapor. The natural effect of this practice is, imperfect atmosphericization of the blood—one of the heaviest chains that binds the negro to slavery. In treating, therefore, their pulmonary affections, the important fact should be taken into consideration, that cold air is inimical to the lungs of healthy negroes when the body is in repose and not heated by exercise, and consequently more prejudicial in the diseases of those organs. A small, steady fire, a close room, and plenty of thick blanket covering, aided with hot stimulating teas, are very essential means in the treatment of the pulmonary congestions to which their lungs are so prone. An accurate diagnosis, whether the complaint be a mere congestion, pleuritis or pneumonia, is not of much practical importance in the first instance, because, whether it be one or the other, warm air is equally essential, and warm stimulating teas to determine to the surface. It is proper first to warm the body by external means and stimulating drinks, after which an emetic, followed by a purgative of a mild kind, will be beneficial. When there is pain in taking a full inspiration, a moderate blood-letting from the arm, followed by half grain or grain doses of tartar emetic, repeated at intervals of an hour or two, and combined with a little anodyne, to prevent its running off by the bowels, will be found a very effectual remedy in subduing inflammation and promoting expectoration. In the typhoid forms of pneumonia, the quinine, in efficient doses, combined with camphor, aromatics and calomel, is generally the best practice. Bleeding is not admissible in this form of pneumonia, otherwise they bear blood-letting in chest complaints much better than any others. But even in these, they will not bear repeated blood-letting, as the white race do.

BILIOUS AND ADYNAMIC FEVERS—REMITTENTS AND INTERMITTENTS.—The next class of complaints to which they are mostly liable, are bilious and adynamic fevers—remittent and intermittent. Evacuating the stomach and bowels by a mild emetico-cathartic, combined with a weak anodyne carminative, to prevent its excessive action, is generally the best medicine to begin with; for, whatever be the type of the fever, as negroes are hearty eaters, it will be an advantage, in the after treatment of the case, to have the *prima viæ* cleared of their load of undigested food, and the superabundant mucosities poured out into the alimentary canal, of a people so phlegmatic, when attacked with a fever suspending digestion and interrupting absorption.

For this purpose, a combination of ipecacuanha, rhubarb and cream of tartar, each half a drachm, and a tea-spoonful of paregoric, in

ginger or pepper tea, is a very safe and effectual medicine. It will vomit, if there be bile or much mucosity, and will afterwards act on the bowels, promote secretion of urine, and determine to the surface; after which a dose or two of quinine will generally effect a cure. Calomel is used too indiscriminately in the treatment of their diseases; nevertheless, in obstinate cases, it is not to be dispensed with. Negroes are very liable to become comatose, particularly after watery operations, or in torpid states of the liver. Such cases are best treated by a combination of calomel, camphor, capsicum, quinine and laudanum, and a blister to the back of the neck. Cold water to the head is dangerous. Nearly all their complaints bear stimulating, aromatic substances much better than similar affections among white people, and will not tolerate evacuations so well. The pure anti-phlogistic treatment by evacuations, cold air, starvation and gum water, so effectual in the inflammatory complaints of the hematose white man, will soon sink them into hopeless collapse. Even under the use of anti-phlogistics in their inflammatory complaints, pepper or ginger-tea, or some stimulant, is necessary to support the vital actions, which would soon fail under such insipid drinks as gum-water. The reason of this is, that the fluids and all the secretions are more acrid than those of the white man. In the latter, the lungs consume more oxygen, the blood is redder and more stimulating, and all the fluids more bland and sweet; whereas, in the negro, the deficient hematosis renders the blood less stimulating, and requires acrid and piquant substances addressed to the digestive system to supply the stimulus that would otherwise be derived from the air in the lungs. Although they are so liable to congestive and bilious fevers—remittent and intermittent—they are not liable to the dreaded *et vomito*, or yellow fever. At least, they have it so lightly, that I have never seen a negro die with black vomit, although I have witnessed a number of yellow fever epidemics. This is a strong proof against the identity of yellow fever and the other fevers just named.

SCROFULA, &c.—Like children, negroes are very liable to colics, cramps, convulsions, worms, glandular and nervous affections, sores, boils, warts, and other diseases of the skin. Scrofula is very common among them. Rickets, diseases of the spine and hip-joint, and white swellings are not uncommon. They are also subject to the goitre. All very fat negroes, except women who have passed the prime of life, are unhealthy and scrofulous. The great remedy for the whole tribe of their scrofulous affections, without which all other remedies do very little good, is *sunshine*. The solar rays is one of the most efficient therapeutic agents, in the treatment of many other affections to which they are liable. A good, wholesome,

mized diet, warm clothing, warm, dry lodgings andunction of the skin with oleaginous substances, and occasional tepid baths of salt and water, are also very necessary remedies. The limits of this report will not permit me to go into details of familiar treatment, as the use of iodine and the usual remedies.

FRANKSIA, PLAN, OR YAWA.—The Franksia, Plan, or Yawa, is a disease thought to be peculiar to negroes. I have seen it in its worst form in the West Indies. I have occasionally met with it in its modified form in the states of Mississippi and Louisiana, where it is commonly mistaken for syphilis. It is a contagious disease, communicable by contact among those who greatly neglect cleanliness. Children are liable to it as well as adults. It is supposed to be communicable in a modified form to the white race, among whom it resembles pseudo-syphilis, or some disease of the nose, throat or larynx. Further observations are wanting in regard to it. It is said to be very prevalent in Tamaulipas in Mexico, attacking the nose and throat, in the first instance, very similar to secondary syphilitic affections, without ever having appeared on the genital organs at all, except in the shape of a slight herpes preputialis. According to my experience, no other remedies have been found to make the least impression upon it but the deuto-chloride of mercury, combined with guaiacum and dulcamara. Our planters do not go to the north or to Europe to learn the art of making sugar, cotton, rice, and tobacco, but they send their sons there to study medicine in the hospitals, where nearly all the diseases they see arise from causes unknown on our plantations—want of food, fire, and the common necessities of life. Very good physicians they might be, if they staid there; but, on returning home, they have to study medicine over again in the school of experience, before they can practise with success, particularly among negroes. It would be very strange, that among the whole multitude of medical schools in the United States, there is not one that has made any special provision for instruction in regard to three millions of people in the southern states, representing half the value of southern property, differently organized in mind and body from any other people, and having diseases requiring peculiar treatment,—if it were not for the well-known fact of the predominance of a most erroneous hypothesis among statesmen, divines, and other classes of people nearly every where, 'That there are no radical or physical differences in mankind, other than those produced by external circumstances, and that the treatment applicable to the white man would be just as good, under similar external circumstances, for the negro.' This false hypothesis is at the root of the doctrine that the liberty and political institutions so beneficial to the white man, would be

equally beneficial to the negro—that there is no internal or physical difference between the two races. The every-day experience of the southern people, where the two races dwell together, proves this hypothesis to be unfounded; whereas its fallacy is not so apparent to the people of the north and of Europe, where only one race of mankind is found in numbers sufficient to make comparisons between the two. Hence they have not the data to arrive at the truth, and, nothing to correct the erroneous views that a false dogma has given them in regard to negro slavery. But it is most strange that our institutions for medical learning, south, should be doing nothing, with such ample materials around them, to overturn an hypothesis founded in gross ignorance of the anatomy and physiology of the African race—an hypothesis threatening to cause a disruption of our federal government, one that could be disproved and put down for ever at the dissecting table; as it also could be by contrasting the phenomena drawn from daily observations taken among three millions of negroes in health and disease, with the phenomena already drawn from observations of the white race; and thereby proving the difference of organisation in mind and body between the two races. Stranger still, that our southern schools in medicine should be content to linger behind those of the north, without even the hope of rivalling them in the numbers of their students, when a provision for including in their course of instruction the three millions of people in our midst not cared for by any school, would, in time, put them far ahead by attracting the current of students south, who have heretofore been attracted to the north. Some provision in our schools especially devoted to the anatomy and physiology of our negroes,—to the treatment of their diseases, to the best means to prevent sickness among them, to improve their condition, and at the same time to make them more valuable to their owners, and governed with more ease and safety,—would be sending science into a new and wide field of usefulness, to reap immense benefits for the millions of both races inhabiting the south.

NEGRO CONSUMPTION.—Negro consumption is a disease almost unknown to medical men of the northern states and Europe. A few southern physicians have acquired some valuable information concerning it from personal experience and observation; but this knowledge is scattered in fragments about, and has never been condensed in a form to make it of much practical utility. Some physicians, looking upon negro consumption through northern books, suppose it to be a variety of phthisis pulmonalis; but it has no form of resemblance to the phthisis of the white race, except in the emaciation, or when it is complicated with the relics of pneumonia or a

badly cured pleurisy. Others regard it as a dyspepsia or some disease of the liver or stomach; the French call it *mal d'estomac*. But dyspepsia is not a disease of the negro; it is, *par excellence*, a disease of the Anglo-Saxon race. I have never seen a well marked case of dyspepsia among the blacks. It is a disease that selects its victims from the most intellectual of mankind, passing by the ignorant and unreflecting.

The popular opinion is that negro consumption is caused by *dirt-eating*. The eating of dirt is not the cause, but only one of the effects—a mere symptom, which may or may not attend it. As in pica, there is often a depraved appetite for substances not nutritious, as earth, chalk, lime, etc.; but oftener, as in malacia, a depraved appetite for nutritious substances, to a greater degree than for non-nutritious. In negro consumption the patients are generally hearty eaters of all kinds of food; but there are exceptions.

The disease may be detected at a very early stage of its existence, by the pale, whitish color of the mucous membrane lining the gums and the inside of the mouth, lips and cheeks: so white are the mucous surfaces, that some overseers call it the paper-gum disease. It can be detected, however, in its incipient state, by making the patient ascend a flight of stairs; the pulse will be accelerated from eighty or ninety beats to an hundred and thirty or forty. All kinds of active exercise will greatly accelerate the pulse—that of walking up hill or up stairs more than any other. The skin is ashy pale and dry; the veins of the head are distended, and show more than in health; occasionally during the day, there is some heat of the skin and febrile excitement; the blood is poor, pale and thin, in the advanced stages, containing very few red globules; but the pathognomonic symptoms of the complaint are the acceleration of the pulse on exercise, and the whiteness of the lining membrane of the cheeks, lips and gums; the lining membrane of the eye-lids is also pale and whitish. It is of importance to know the pathognomonic signs in its early stages, not only in regard to its treatment, but to detect impositions, as negroes afflicted with the complaint are often for sale; the acceleration of the pulse on exercise incapacitates them for labor, as they quickly give out and have to leave their work. This induces their owners to sell them, although they may not know the cause of their inability to labor. Many of the negroes brought south for sale are in the incipient stage of the disease; they are found to be inefficient laborers, and are sold in consequence thereof.

In order to be able to prevent or cure any malady, it is necessary to know its cause and its seat. The seat of negro consumption is not in the lungs, stomach, liver, or any organ

of the body, but in the mind, and its cause is generally mismanagement or bad government on the part of the master, and superstition or dissatisfaction on the part of the negro. The patients themselves believe that they are poisoned: they are right, but it is not the body, but the mind that is poisoned. Negroes are very jealous and suspicious; hence, if they are slighted or imposed on in any way, or over-tasked, or do not get what they call their rights, they are apt to fall into a morbid state of mind, with sulkiness and dissatisfaction very plainly depicted in their countenances. It is bad government to let them remain in this sulky, dissatisfied mood, without inquiring into its causes and removing them; otherwise, its long continuance leads to the disease under consideration. They fancy that their fellow-servants are against them, that their master or overseer cares nothing for them or is prejudiced against them, or that some enemy on the plantation or in the neighborhood has tricked them, that is, laid poison for them to walk over, or given it to them in their food or drinks. On almost every large plantation there is one or more negroes, who are ambitious of being considered in the character of conjurers, in order to gain influence, and to make the others fear and obey them. The influence that these pretended conjurers exercise over their fellow-servants would not be credited by persons unacquainted with the superstitious mind of the negro. Nearly all, particularly those who have passed the age of puberty, are at times kept in constant dread and terror by the conjurers. These impostors, like all other impostors, take advantage of circumstances to swell their importance, and to inculcate a belief in their miraculous powers to bring good or evil upon those they like or dislike. It may be thought that the old superstition about conjuration has passed away with the old stock of native Africans; but it is too deeply radicated in the negro intellect to pass away; intelligent negroes believe in it, who are ashamed to acknowledge it. The effect of such a superstition—a firm belief that he is poisoned or conjured—upon the patient's mind, already in a morbid state, and his health affected from hard usage, over-tasking, or exposure, want of wholesome food, good clothing, warm, comfortable lodging, with the distressing idea that he is an object of hatred or dislike both to his master and fellow-servants, and has no one to befriend him, tends directly to generate that erythrim of mind which is the essential cause of negro consumption. This erythrim of mind, like the erythrim of the gravid uterus in delicate females, often causes a depraved appetite for earth, chalk, lime, and such indigestible substances. The digestive passages, in both cases, become coated with accecent mucosities or clogged with sa-

burricious matters. Natural instinct leads such patients to absorbents to correct the state of the stomach.

In the depraved appetite caused by pregnancy, or in young women afflicted with leucorrhœa, true art improves upon instinct, or the natural medication of the patients themselves, by substituting magnesia, cathartics, bitters and tonics. But for the same morbid appetite in negro consumption, the natural medication, resorted to by the instinctive wants of the patient, is mistaken for the cause of the disease. It is not only earth or clay that the patients have an appetite for, but, like chlorotic girls, they desire vinegar, pepper, salt, and stimulants. Their skins are dry, proving want of cutaneous exhalation; very little aqueous vapor is thrown off from the lungs, owing to their inability to take exercise. Consequently, defluxions occur on the mucous coat of the digestive passages, from want of action of the skin and lungs; the mucosity lining the intestinal canal interrupts the absorption of chyle; the blood becomes impoverished, and the body wastes away from interstitial absorption and want of nutriment.

As far as medication is concerned, I have found a combination of tartar emetic half grain, capsicum five grains; a teaspoonful of charcoal, a tablespoonful of gum guaiacum, three times a day, a good remedy; also, rubbing the whole surface of the body over with some oily substance. But there are various other remedies, as purgatives, tonics, &c., which should be assisted by removing the original cause of the dissatisfaction or trouble of mind, and by using every means to make the patient comfortable, satisfied and happy.

DRAPETOMANIA, OR THE DISEASE CAUSING NEGROES TO RUN AWAY.—*Drapetomania* is from *δραπέτης*, a runaway slave, and *μανία*, mad or crazy. It is unknown to our medical authorities, although its diagnostic symptom, the absconding from service, is as well known to our planters and overseers as it was to the ancient Greeks, who expressed, by the single word *δραπέτης*, the fact of the absconding, and the relation that the fugitive held to the person he fled from. I have added to the word meaning runaway slave another Greek term, to express the disease of the mind causing him to abscond. In noticing a disease not heretofore classed among the long list of maladies that man is subject to, it was necessary to have a new term to express it. The cause, in the most of cases, that induces the negro to run away from service, is as much a disease of the mind as any other species of mental alienation, and much more curable, as a general rule. With the advantages of proper medical advice, strictly followed, this troublesome practice that many negroes have of running away can be almost entirely prevented, although the slaves be located on the

borders of a free state, within a stone's throw of the abolitionists. I was born in Virginia, east of the Blue Ridge, where negroes were numerous, and studied medicine some years in Maryland, a slave state, separated from Pennsylvania, a free state, by Mason & Dixon's line—a mere air line, without wall or guard. I long ago observed that some persons considered as very good, and others as very bad masters, often lost their negroes by their absconding from service; while the slaves of another class of persons, remarkable for order and good discipline, but not praised or blamed as good or bad masters, never ran away, although no guard or forcible means were used to prevent them. The same management which prevented them from walking over a mere nominal, unguarded line, will prevent them from running away any where.

To ascertain the true method of governing negroes, so as to cure and prevent the disease under consideration, we must go back to the Pentateuch, and learn the true meaning of the untranslated term that represents the negro race. In the name there given to that race, is locked up the true art of governing negroes in such a manner that they cannot run away. The correct translation of that term declares the Creator's will in regard to the negro; it declares him to be the submissive knee-bender. In the anatomical conformation of his knees, we see "*genu flexit*" written in his physical structure, being more flexed or bent than any other kind of man. If the white man attempts to oppose the Deity's will, by trying to make the negro any thing else than "*the submissive knee bender*," (which the Almighty declared he should be,) by trying to raise him to a level with himself, or by putting himself on an equality with the negro; or if he abuses the power which God has given him over his fellow-man, by being cruel to him, or punishing him in anger, or by neglecting to protect him from the wanton abuses of his fellow-servants and all others, or by denying him the usual comforts and necessities of life, the negro will run away; but if he keeps him in the position that we learn from the Scriptures he was intended to occupy, that is, the position of submission; and if his master or overseer be kind and gracious in his bearing towards him, without condescension, and at the same time ministers to his physical wants, and protects him from abuses, the negro is spell-bound, and cannot run away. "*He shall serve Japheth*"; he shall be his servant of servants," on the conditions above mentioned—conditions that are clearly implied, though not directly expressed. According to my experience, the "*genu flexit*," the awe and reverence, must be exacted from them, or they will despise their masters, become rude and ungovernable, and run away. On Mason & Dixon's line, two classes of persons were apt to lose their negroes: those who

made themselves too familiar with them, treating them as equals, and making little or no distinction in regard to color; and, on the other hand, those who treated them cruelly, denied them the common necessities of life, neglected to protect them against the abuses of others, or frightened them by a blustering manner of approach, when about to punish them for misdemeanors. Before negroes run away, unless they are frightened or panic-struck, they become sulky and dissatisfied. The cause of this sulkiness and dissatisfaction should be inquired into and removed, or they are apt to run away, or fall into the negro consumption. When sulky and dissatisfied without cause, the experience of those on the line or elsewhere was decidedly in favor of whipping them out of it, as a preventive measure against absconding, or other bad conduct. It was called whipping the devil out of them.

If treated kindly, well fed and clothed, with fuel enough to keep a small fire burning all night—separated into families, each family having its own house—not permitted to run about at night to visit their neighbors, to receive visits, or to use intoxicating liquors, and not overworked or exposed too much to the weather, they are easily governed—more so than any other people in the world. When all this is done, if any one or more of them, at any time, are inclined to raise their heads to a level with their master or overseer, humanity and their own good require that they should be punished until they fall into that submissive state which it was intended for them to occupy in all after-time, when their progenitor received the name of Canaan or "submissive knee-bender." They have only to be kept in that state and treated like children, with care, kindness, attention, and humanity, to prevent and cure them from running away.

DYSAESTHESIA ÆTHIOPIA, OR HEbetUDE OF MIND AND OBtUSE SENSIBILITY OF BODY—A DISEASE PECULIAR TO NEGROES, CALLED BY OVERSEERS, "RASCALITY."—*Dysaesthesia Æthiopica* is a disease peculiar to negroes, affecting both mind and body in a manner as well expressed by *dysaesthesia*, the name I have given it, as could be by a single term. There is both mind and sensibility, but both seem to be difficult to reach by impressions from without. There is a partial insensibility of the skin, and so great a hebetude of the intellectual faculties, as to be like a person half asleep, that is with difficulty aroused and kept awake. It differs from every other species of mental disease, as it is accompanied with physical signs or lesions of the body discoverable to the medical observer, which are always present and sufficient to account for the symptoms. It is much more prevalent among free negroes living in clusters by themselves, than among

slaves on our plantations, and attacks only such slaves as live like free negroes in regard to diet, drinks, exercise, etc. It is not my purpose to treat of the complaint as it prevails among free negroes, nearly all of whom are more or less afflicted with it, that have not got some white person to direct and take care of them. To narrate its symptoms and effects among them would be to write a history of the ruins and dilapidation of Hayti, and every spot of earth they have ever had uncontrolled possession over for any length of time. I propose only to describe its symptoms among slaves.

From the careless movements of the individuals affected with the complaint, they are apt to do much mischief, which appears as if intentional, but is mostly owing to the stupidity of mind and insensibility of the nerves induced by the disease. Thus, they break, waste and destroy every thing they handle—abuse horses and cattle—tear, burn or rend their own clothing, and, paying no attention to the rights of property, steal others, to replace what they have destroyed. They wander about at night, and keep in a half nodding sleep during the day. They slight their work—cut up corn, cane, cotton or tobacco when hoeing it, as if for pure mischief. They raise disturbances with their overseers and fellow-servants without cause or motive, and seem to be insensible to pain when subjected to punishment. The fact of the existence of such a complaint, making man like an automaton or senseless machine, having the above or similar symptoms, can be clearly established by the most direct and positive testimony. That it should have escaped the attention of the medical profession, can only be accounted for because its attention has not been sufficiently directed to the maladies of the negro race. Otherwise a complaint of so common occurrence on badly-governed plantations, and so universal among free negroes, or those who are not governed at all—a disease radiated in physical lesions, and having its peculiar and well-marked symptoms and its curative indications, would not have escaped the notice of the profession. The northern physicians and people have noticed the symptoms, but not the disease from which they spring. They ignorantly attribute the symptoms to the debasing influence of slavery on the mind, without considering that those who have never been in slavery, or their fathers before them, are the most afflicted, and the latest from the slaveholding south the least. The disease is the natural offspring of negro liberty—the liberty to be idle, to wallow in filth, and to indulge in improper food and drinks.

In treating of the anatomy and physiology of the negro, I showed that his respiratory system was under the same physio-

logical laws as that of an infant child of the white race; that a warm atmosphere, loaded with carbonic acid and aqueous vapor, was the most congenial to his lungs during sleep, as it is to the infant; that to insure the respiration of such an atmosphere, he invariably, as if moved by instinct, shrouds his head and face in a blanket or some other covering when disposing himself to sleep; that in sleeping by the fire in cold weather, he turns his head to it, instead of his feet, evidently to inhale warm air; that when not in active exercise, he always hovers over a fire in comparatively warm weather, as if he took a positive pleasure in inhaling hot air and smoke when his body is quiescent. The natural effect of this practice, it was shown, caused imperfect atmospherization or vitalization of the blood in the lungs, as occurs in infancy, and a hebetude or torpor of intellect—from blood not sufficiently vitalized being distributed to the brain; also a slothfulness, torpor and disinclination to exercise from the same cause—the want of blood sufficiently vitalized in the circulating system.

When left to himself, the negro indulges in his natural disposition to idleness and sloth, and does not take exercise enough to expand his lungs and to vitalize his blood, but dozes out a miserable existence in the midst of filth and uncleanness, being too indolent, and having too little energy of mind to provide for himself proper food and comfortable lodging and clothing. The consequence is, that the blood becomes so highly carbonized and deprived of oxygen, that it not only becomes unfit to stimulate the brain to energy, but unfit to stimulate the nerves of sensation distributed to the body. A torpor and insensibility pervades the system; the sentient nerves distributed to the skin lose their feeling in so great a degree, that he often burns his skin by the fire he hovers over without knowing it, and frequently has large holes in his clothes, and the shoes on his feet burnt to a crisp, without having been conscious when it was done. This is the disease called *dysæsthesia*—a Greek term expressing the dull or obtuse sensation that always attends the complaint. When aroused from his sloth by the stimulus of hunger, he takes any thing he can lay his hands on, and tramples on the rights, as well as on the property of others, with perfect indifference as to consequences. When driven to labor by the compulsive power of the white man, he performs the task assigned to him in a headlong, careless manner, treading down with his feet, or cutting with his hoe the plants he is put to cultivate—breaking the tools he works with, and spoiling every thing he touches that can be injured by careless handling. Hence the overseers call it “ras-

cality,” supposing that the mischief is intentionally done. But there is no premeditated mischief in the case; the mind is too torpid to meditate mischief, or even to be aroused by any angry passions to deeds of daring. *Dysæsthesia*, or hebetude of sensation of both mind and body, prevails to so great an extent, that when the unfortunate individual is subjected to punishment, he neither feels pain of any consequence, nor shows any unusual resentment, more than by a stupid sulkiness. In some cases, *anæsthesia* would be a more suitable name for it, as there appears to be an almost total loss of feeling. The term “rascality,” given to this disease by overseers, is founded on an erroneous hypothesis, and leads to an incorrect empirical treatment, which seldom or never cures it.

The complaint is easily curable, if treated on sound physiological principles. The skin is dry, thick and harsh to the touch, and the liver inactive. The liver, skin and kidneys should be stimulated to activity, and be made to assist in decarbonizing the blood. The best means to stimulate the skin is, first, to have the patient well washed with warm water and soap; then, to anoint it all over with oil, and to slap the oil in with a broad leather strap; then to put the patient to some hard kind of work in the open air and sunshine, that will compel him to expand his lungs, as chopping wood, splitting rails, or sawing with the cross-cut or whip saw. Any kind of labor will do that will cause full and free respiration in its performance, as lifting or carrying heavy weights, or brisk walking; the object being to expand the lungs by full and deep inspirations and expirations, thereby to vitalize the impure circulating blood by introducing oxygen and expelling carbon. This treatment should not be continued too long at a time, because, where the circulating fluids are so impure as in this complaint, patients cannot stand protracted exercise without resting frequently, and drinking freely of cold water or some cooling beverage, as lemonade, or alternated pepper tea sweetened with molasses. In bad cases, the blood has always the appearance of blood in scurvy, and commonly there is a scorbutic affection to be seen on the gums. After resting until the palpitation of the heart caused by the exercise is allayed, the patient should eat some good wholesome food, well seasoned with spices, and mixed with vegetables, as turnip or mustard salad, with vinegar. After a moderate meal, he should resume his work again, resting at intervals, and taking refreshments, and supporting the perspiration by partaking freely of liquids. At night he should be lodged in a warm room with a small fire in it, and should have a clean bed with sufficient

blanket covering, and be washed clean before going to bed: in the morning, oiled, slapped, and put to work as before. Such treatment will, in a short time, effect a cure in all cases which are not complicated with chronic visceral derangements. The effect of this or a like course of treatment is often like enchantment. No sooner does the blood feel the vivifying influences derived from its full and perfect atmospherization by exercise in the open air and in the sun, than the negro seems to be awakened to a new existence, and to look grateful and thankful to the white man whose compulsory power, by making him inhale vital air, has restored his sensation, and dispelled the mist that clouded his intellect. His intelligence restored, and his sensations awakened, he is no longer the *bipedum nequissimum*, or arrant rascal, he was supposed to be, but a good negro that can hoe or plough, and handle things with as much care as his fellow servants.

Contrary to the received opinion, a northern climate is the most favorable to the intellectual development of negroes; those of Missouri, Kentucky, and the colder parts of Virginia and Maryland having much more mental energy, being more bold and ungovernable, than in the southern lowlands; a dense atmosphere causing a better ventilation of their blood.

Although idleness is the most prolific cause of dysæsthesia, yet there are other ways that the blood gets deteriorated. I said before that negroes are like children, requiring government in every thing. If not governed in their diet, they are apt to eat too much salt meat and not enough bread and vegetables, which practice generates a scorbutic state of the fluids and leads to the affection under consideration. This form of the complaint always shows itself in the gums, which become spongy and dark and leave the teeth. Uncleanliness of skin and torpid liver also tend to produce it. A scurvy set of negroes means the same thing, in the south, as a disorderly, worthless set. That the blood, when rendered impure and carbonaceous from any cause, as from idleness, filthy habits, unwholesome food or alcoholic drinks, affects the mind, is not only known to physicians, but was known to the Bard of Avon when he penned the lines—"We are not ourselves when Nature, being oppressed, commands the mind to suffer with the body."

According to unaltered physiological laws, negroes, as a general rule, to which there are but few exceptions, can only have their intellectual faculties awakened in a sufficient degree to receive moral culture and to profit by religious or other instructions, when under the compulsory authority of the white man; because, as a general rule, to which there are but few exceptions, they will not take suffi-

cient exercise, when removed from the white man's authority, to vitalize and decarbonize their blood by the process of full and free respiration, that active exercise of some kind alone can effect. A northern climate remedies, in a considerable degree, their naturally indolent disposition; but the dense atmosphere of Boston or Canada can scarcely produce sufficient hematosis and vigor of mind to induce them to labor. From their natural indolence, unless under the stimulus of compulsion, they doze away their lives, with the capacity of their lungs for atmospheric air only half expanded, from the want of exercise to superinduce full and deep respiration. The inevitable effect is to prevent a sufficient atmospherization or vitalization of the blood, so essential to the expansion and the freedom of action of the intellectual faculties. The black blood distributed to the brain chains the mind to ignorance, superstition and barbarism, and bolts the door against civilization, moral culture, and religious truth. The compulsory power of the white man, by making the slothful negro take active exercise, puts into active play the lungs, through whose agency the vitalized blood is sent to the brain, to give liberty to the mind and to open the door to intellectual improvement. The very exercise, so beneficial to the negro, is expended in cultivating those burning fields of cotton, sugar, rice, and tobacco, which, but for his labor, would, from the heat of the climate, go uncultivated, and their products be lost to the world. Both parties are benefited—the negro as well as the master—even more. But there is a third party benefited—the world at large. The three millions of bales of cotton, made by negro labor, afford a cheap clothing for the civilized world. The laboring classes of all mankind having less to pay for clothing, have more money to spend in educating their children in intellectual, moral, and religious progress.

The wisdom, mercy, and justice of the decree, that Canaan shall serve Japheth, is proved by the disease we have been considering, because it proves that his physical organization and the laws of his nature are in perfect unison with slavery, and in entire discordance with liberty—a discordance so great as to produce the loathsome disease that we have been considering, as one of its inevitable effects—a disease that locks up the understanding, blunts the sensations, and chains the mind to superstition, ignorance, and barbarism. Slaves are not subject to this disease, unless they are permitted to live like free negroes, in idleness and filth—to eat improper food or to indulge in spirituous liquors. It is not their masters' interest that they should do so; as they would not only be unprofitable, but as great a nuisance to the south as the free negroes were found to be in London, whom the British government, more than half a

century ago, colonized in Sierra Leone to get them out of the way. The mad fanaticism that British writers, lecturers and emissaries, and the East India Company, planted in our northern states, after it was found by well-tried experiments that free negroes in England, in Canada, in Sierra Leone and elsewhere were a perfect nuisance, and would not work as free laborers, but would retrograde to barbarism, was not planted there in opposition to British policy. Whatever was the motive of Great Britain in sowing the whirlwind in our northern states, it is now threatening the disruption of a mighty empire of the happiest, most progressive, and Christian people that ever inhabited the earth—and the only empire on the wide earth that England dreads as a rival, either in arts or in arms.

Our Declaration of Independence, which was drawn up at a time when negroes were scarcely considered as human beings, "*That all men are by nature free and equal*," and only intended to apply to white men, is often quoted in support of the false dogma that all mankind possess the same mental, physiological, and anatomical organization, and that the liberty, free institutions, and whatever else would be a blessing to one portion, would, under the same external circumstances, be to all, without regard to any original or internal differences inherent in the organization. Although England preaches this doctrine, she practises in opposition to it every where. Instance her treatment of the Gipsies in England, the Hindoos in India, the Hottentots at her Cape colony, and the aboriginal inhabitants of New-Holland. The *dyæsthesia æthiopica* adds another to the many ten thousand evidences of the fallacy of the dogma that abolitionism is built on; for here, in a country where two races of men dwell together, both born on the same soil, breathing the same air, and surrounded by the same external agents—liberty, which is elevating the one race of people above all other nations, sinks the other into beastly sloth and torpidity; and the slavery, which the one would prefer death rather than endure, improves the other in body, mind, and morals; thus proving the dogma false, and establishing the truth that there is a radical, internal, or physical difference between the two races, so great in kind, as to make what is wholesome and beneficial for the white man, as liberty, republican or free institutions, &c., not only unsuitable to the negro race, but actually poisonous to its happiness.

CONCLUSION.—In the Report on the Diseases and Physical Peculiarities of the Negro Race, read before the Medical Association of Louisiana, and published in the "New-Orleans Medical and Surgical Journal" of May last, I briefly enumerated some of the more striking anatomical and physiological differences separating the negro from the white man. At-

tention was also called to the fact, that the same medical treatment which would benefit or cure a white man would often injure or kill a negro, because of the differences in the organic or physical characters imprinted by the hand of nature on the two races. It was not deemed necessary, in that brief paper, to refer to authorities to prove the facts enumerated, which are just as well known and established in that branch of medicine embracing comparative anatomy and physiology, as the size and motion of the planets in astronomy. The report was not drawn up to meet objections coming from those persons who had never made comparative anatomy and physiology a special study. But as they have made objections to it, and are inclined to look upon the facts it sets forth as a farrago of nonsense, or at least as very questionable assertions, needing proof, the object of this paper is to give them the proof. This trouble might have been spared, if the comparative anatomy and physiology of the different races of mankind had not been strangely neglected in the course of instruction in the medical schools of the present day. In Europe, where there is but one race of mankind to treat, comparative anatomy and physiology are of no great practical importance; nevertheless, these branches have been extensively cultivated, particularly in Germany and France, by the greatest men that have ever adorned the medical profession. In this country, comparative anatomy has been very much neglected, and comparative physiology and therapeutics more so. Our northern states, like Europe, contain but one race of men, (except a few worthless free negroes,) and all the medical instruction of the books and schools in that region is confined to that one race. But here, in the south, we have two distinct races of people living in juxtaposition, in nearly equal numbers, differing widely in their anatomy and physiology, and consequently requiring a corresponding difference in their medical treatment. Yet, when it was asserted in the report, that the Queen of England's medical advisers, without a knowledge of the physical differences between the Ethiopian and Caucasian, would not be qualified to prescribe for a negro, great exceptions were taken to the remark by those who are aware that different temperaments, as the sanguine and phlegmatic, require important modifications in medical treatment, but were not aware that Cuvier, Ebel, Sæmmering, Malpighi, Pechlin, Meckel, Albinus, Stabner, Virey, Blumenbach, and many illustrious men, have long ago demonstrated, by dissections, so great a difference in the organization of the negro from that of the white man, as to induce the majority of naturalists to refer him to a different species, having a different origin. So great is the difference in the medical treatment demanded by the peculiar organization, physiology, and habits of our black popula-

tion, that very learned physicians from Europe and the northern states, on first coming south, have felt and acknowledged their incompetency to treat their diseases successfully, until they have had time to make themselves acquainted with their peculiarities. The owners of slaves consider it safer, in most cases, to trust to the empiricism of overseers, rather than to the regular doctors who are newcomers, practising on the false abolition theory that the negro is only a lamp-blackened white man. There is nothing to prevent young physicians, newcomers to the south, from treating negroes successfully, if they were to study their diseases, their anatomy, physiology, and pathology, with half the care they devote to the white paupers in the northern and European hospitals and almshouses. On coming south, they find no such class of persons as those whom they have mostly studied, to treat. They not only find no complaints arising from want of food, fire, clothing, and the common comforts of life, such as they have been accustomed to see in the hospitals, but they find one half the population composed of a people whose anatomy and physiology is a sealed book to them. Although the every-day experience of the southern people proves that nature has made so great a difference between the white and black races as to make it absolutely necessary, for the safety of the state and well-being of society, that the latter should be subjected to different laws and institutions from the former, yet the text-books of the northern medical schools contain not a syllable to show what that difference is, but advise the same rules and principles, and the same therapeutic agents, as if there was no other race of mankind than that inhabiting the northern states.

The popular error prevalent at the north, that the negro is a white man, but, by some accident of climate or locality, painted black, requiring nothing but liberty and equality—social and political—to wash him white, is permitted to go uncorrected by the northern medical schools. This error can be and should be corrected at the dissecting table, by reviving comparative anatomy, and making it an essential part of a medical education. If the northern school will not correct it, the southern schools, instead of being, as they now are, northern institutions located in the south, using the same text-books, and echoing the same doctrines, should take upon themselves its correction, and have their own text books, containing not only the anatomy, physiology, and therapeutics applicable to the white race of people, but the anatomy, physiology, and therapeutics of the black race also. As soon as they do this, the empire of medical learning will come south, where the study of two races of people will give students better opportunities of acquiring knowledge than the one race at the north. Physicians will also reclaim the practice, among three millions of people, that

the overseers have mostly got. It will be to the interest of the planters to employ physicians instead of overseers to treat the diseases of their negroes, as soon as they properly qualify themselves for this branch of southern practice. I have never known, in all my experience, a southern country physician want practice who was properly qualified to treat the diseases of negroes. It is only those medical men whose knowledge is confined to the diseases, the anatomy and physiology of only one race of men, as contained in the northern hornbooks in medicine, who are superseded by overseers and empirical practitioners.

So little attention has been paid to the anatomy and physiology of the negro race, that when it was mentioned, among other peculiarities of the negro, that his blood was blacker than the white man's, it was supposed by those physicians who have paid no attention to comparative anatomy and physiology, that I was making random assertions, requiring proof, instead of reiterating truths that have been known for centuries, needing no other proof than the perusal of works of the highest authority in medicine.

Thus, Malpighi, the celebrated anatomist, of *rete mucosum* memory, says: "La couleur noire reside non seulement dans le fluide qui colore le tissu muqueux, mais encore le sang, le part corticale du cerveau et plusieurs autres parts internes du corps imprégnées d'une teinte noire, et ce qui a été remarqué également par d'autres observateurs."

Here is not only the authority of Malpighi in proof of the darker color of the negro's blood, and the impregnation of the brain, membranes, and other internal parts of the body with a darker hue, but likewise his testimony that other observers had remarked the same thing.

J. F. Meckel (see vol. xiii, p. 69, *Mem. Acad. Berlin*) says, that not only the blood, but the bile and cortical part of the brain are of a darker color in the negro than the white man. According to his authority, the negro is not only a negro on the skin, but under the skin. The words of that great comparative anatomist are: "*Le nègre n'est donc pas seulement nègre à l'extérieur, mais dans toutes ses parts et jusque dans les plus profondément situées.*"

Nich. Pechlin, in a work entitled "*De cute Ethiopum*," and Albinus, (*Diss. de sede et causa coloris Ethiop.*) have remarked, that not only the negro but the muscles of the negro are of a darker red than the white man. These authors also state that the membranes, tendons, and aponeuroses, so brilliantly white in the Caucasian race, have a livid cloudiness in the African.

J. J. Virey, one of the authors of the great *Dictionary of Medical Sciences*, Paris, says, in the thirty-fifth volume, p. 388, that the negro's flesh differs in color from the white man's, as

the flesh of the hare differs from the rabbit. This author confirms every thing said in the report about the darker color of the blood, membranes, smaller size of the brain, and larger size of the nerves in the negro than the white man.

The celebrated anatomists, Scemmerring and Ebel, also speak of the darker color of the blood, muscles, &c. These anatomists confirm every word in the report about the brain being smaller and the nerves larger in the black than in the white race.

M. Cuvier, Gall and Spurzheim, also found the capacity of the brain about a ninth less in the negro than in the European.

Samuel George Morton (see "*Observations of the size of the Brain in Various Races and Families of Man*," Philadelphia, 1849) has ascertained that the negro's brain is nine cubic inches less than the white man's.

Lately, some attempts have been made by British abolitionists to distort the facts of science, by representing the African brain as equal to that of the European, and the mind of the former equal to the latter. A certain Dr. Robert Bentley Todd, of King's College, London, in a work on the "*Observations of the Brain, Spinal Cord, and Ganglions*," (London, 1845,) endeavors to throw some doubt and uncertainty on the received and well-established facts in regard to the inferiority of the negro's intellect, the comparative smallness of his brain, and the larger size of his nerves. Also, James Cowles Pritchard, another British writer, author of the "*Researches on the Physical History of Mankind*," in four volumes, (London, 1844,) an abolition work, disguised under the pretense that the authority of the Bible would be impeached if the great differences that natural historians and comparative anatomists professed to have discovered in mankind were not called in question—Pritchard, in the preface of his work, admits that the weight of authority in the learned world is altogether against his conclusions. His conclusions, not flowing from the premises, prove that scientific truth was not the object of his work; that it was not written for learned men, but to cast dust into the eyes of the vulgar, to prevent them from seeing the truth on the slavery question. He pretends to be very fearful that the learned anatomists and naturalists, unless held in check, will bring the Scriptures into disrepute. He does not seem to be aware of what Cardinal Wiseman justly observes, "that it is only half-way science and half-way truths that militate against the authority of the Bible." The whole truth, when brought out, and perfect freedom of science to pursue its investigations untrammelled to its terminus, have, in every instance, demonstrated the truth of the Bible; while imperfect investigations and the omission of the truth, or the tying science down to the narrow interpretations of biblical commentators, have

generally led to skepticism and infidelity. Pritchard seems to be so much afraid that if the differences which Malpighi, Scemmerring, Cuvier, and other comparative anatomists have discovered in the negro's organization, approximating him to the monkey tribes, be admitted, the Bible will be invalidated, that he has taken much pains to try to overturn general truths and principles by partial exceptions. He adduces instances to prove that white persons have turned black, in whole or in part, and that the negro's skin has, in some instances, turned white. But he ought to know that the change of color in all such cases is the effect of disease. Dr. Rush was so much afraid that the black skin, thick lips, and flat nose of the negro would invalidate the Mosaic account of the creation of man, and the unity of the human family, that he published in the Medical Repository (vol. iv, p. 409) some suggestions, attributing the black color, thick lips, and flat nose to a disease resembling leprosy. But observation proved that, so far from the black color being caused by disease, the blackest negroes were always the healthiest, and the thicker the lips, and the flatter the nose, the sounder the constitution. Both Pritchard and Todd labor to prove by a few cases, exceptions to the general rule, that the brain of the negro and his mental capacity are equal to the white man, lest the Scriptures be invalidated, if any inferior slave race be admitted. They overlooked the fact that the Mosaic history distinctly specifies an inferior slave race of people, called Canaanites, Gibeonites, &c., and that these people were reduced to slavery, and their country taken from them, by Divine command. In aiming to overthrow Cuvier's specific traits of the negro's organization, Pritchard did not seem to be aware that Cuvier and Moses agree exactly in their definitions—both defining the negro as the "*knee bender*." (See Cuvier's *Mém. du Muséum d'Histoire Nat.*, tome iii, p. 159—where the anatomical structure of the negro's knees is brought forward, by the greatest naturalist the world ever saw, as a specific difference between him and the white man, and also the inferiority of intellect, from the diminished quantity of brain.) Exactly the same things are set forth in the inspired writings, by the name given to the Canaanite, or Ethiopian race—the Hebrew verb, *Canah*, from which the word Canaan is derived, literally meaning *knee-bender*—*crushed or broken in mind*;—tantamount to Cuvier's race of man with weak and timid mind, and *les genoux à demi-flechis*. Hence it would appear that the Bible does not stand in need of Todd, Pritchard, and other British abolitionists, to support its truth by special pleading, or by dodging the truths of science.

Both Todd and Pritchard are compelled to admit that the negro's blood is darker than the white man's; but they deny that the brain is of a darker color, as Meckel, Pechlin, Albi-

na, Malpighi, and many other comparative anatomists have asserted. They quote three dissections made by Sæmmering, where the difference in color was not apparent, but rather unnaturally white. They concealed the fact, or did not know it, that disease tends to obliterate the dark color that pervades the negro's organization, giving the deeper-seated parts an unnatural whiteness. Thus, as the report sets forth, in negro consumption, the mucous membranes, instead of being dark, are paler and whiter than in the Caucasian race. It would be very unfair to adduce those cases of whiteness of the gums and mucous surfaces in diseased or consumptive negroes, to disprove the fact of darkness being the general rule.

Todd and Pritchard labor much to call in question the facts, heretofore observed by comparative anatomists, that the nerves leading from the brain are larger, in proportion, than in the white man. Yet they are forced to admit that the negro's sense of smell and hearing is more acute. The auditory and olfactory nerves must, therefore, be larger, or the physiological law of nervous development, being proportional to activity of function, must be denied. Those, likewise, who deny that the nerves of the stomach are no larger in the negro than the white man, are compelled to admit that his digestive and assimilating powers are stronger, which is the same thing as to admit that the nerves of organic life are larger.

Every thing asserted in the report in regard to the negro's eye, and his bearing sunlight without a covering on his head, will be fully confirmed by reference to Sam. Thom. Sæmmering's work, entitled "*Icones Oculi Humani*," where it is distinctly stated that the *plica lunaris* in the inner canthus of the negro's eye is anatomically constructed like that of the orang-outang, and not like that of the white man.

Virey confirms every word said in the report about the small size of infant negroes' heads, and the sutures being closed. (See Dict. des Science Med., vol. xxxv., p. 401.)

In regard to the bones of the negro being harder, whiter, and containing more phosphate of lime than those of the white man, naturalists universally agree. Herodotus mentions the greater hardness of the Ethiopian skulls, proving, in that respect at least, that the negro is the same now that he was two thousand years ago.

The *Crania Egyptiaca* prove, as Morton justly observes, and has placed on the title-page of his catalogue of skulls, that "the physical or organic characters which distinguish the several races of men, are as old as the earliest records of our species."

A radical reformation is greatly needed in our system of medical education, which is so defective as to lead to the fatal error in practice, that there are no physical or organic characters in the negro's organization different

from that of the white man. A blundering practice in ignorance of the negro's anatomy and physiology is not the only evil of this defective system of education. The peculiar phenomena indicating the debasement of mind springing from this difference in organization, are attributed by the *profanum vulgus* of the north to the effects of southern slavery. But it could easily be shown, by anatomy, physiology, and ethnographical investigations, that the debasement of mind supposed to arise from southern slavery, arises from causes imprinted by the hand of nature on the sons of Ham, so far back as the time when the catacombs of Egypt were constructed. The vulgar error that there is no difference in the negro's organization, physiology, and psychology, and that all the apparent difference arises from southern slavery, is the cause of all those political agitations which are threatening to dissolve our Union. The knowledge to correct this most mischievous error, which has already split nearly every Protestant denomination of Christians in the United States, is to be found by cultivating comparative anatomy, physiology, history, and ethnography.

NEGROES—PHYSICAL CHARACTER OF.—

The question of the human race, whether a unity or not, is being now discussed, with great ability, by naturalists all over the world. We may mention among others, Morton, Pritchard, &c., and Nott, of Mobile, whose contributions have appeared in our Review, and who has lately written an able work upon the subject, Bachman of Charleston, also the author of a late treatise, and Professor Agassiz. This subject has an important bearing just now, in examining the position occupied by the negro, whom philanthropy is seeking to elevate to the highest status of humanity.

Upon the table before us is an interesting pamphlet, read before the American Ethnological Society, Nov. 1849, by P. A. Browne, LL.D., in answer to the declaration of Pritchard, that "The covering of the negro's head is hair, properly so termed, and not wool." We extract the conclusions of Mr. Browne, as having some practical weight:

1st. Hair is in shape either cylindrical or oval; but wool is eccentrically elliptical or flat; and the covering of the negro's head is eccentrically elliptical or flat.

2d. The direction of hair is either straight, flowing, or curled; but wool is crisped or frizzled, and sometimes spirally twisted; and the covering of the negro's head is crisped or frizzled, and sometimes spirally twisted.

3d. Hair issues out of the epidermis at an acute angle, but wool emerges at a right angle; and the covering of the negro's head issues out of the epidermis at a right angle.

4th. The coloring matter of a perfect hair, for example that of the head of the white

man, is contained in a central canal, but that of wool is disseminated in the cortex, or in the cortex and intermediate fibres; and the covering of the head of the negro has no central canal.

5th. The scales of the cortex of hair are less numerous than those of wool, are smooth, and less pointed, and they embrace the shaft more intimately; and the scales on the filaments of the covering of the negro's head are numerous, rough, pointed, and do not embrace the shaft intimately.

COROLLARY.—Hair will not felt, but wool will; and the covering of the negro's head will felt—has been felted.

For these and other reasons we are "convinced" that the negro has on his head "wool, properly so termed," and not hair. And since the white man has hair upon his head, and the negro has wool, we have no hesitancy in pronouncing that they belong to two distinct species.

M. Flourens, an eminent French physiologist, found four distinct layers between the cuticle and the cutis; the second of which, he says, is a mucous membrane—a *distinct organized body*, underlying the pigment, and existing in persons of dark color only. M. Flourens sought in vain for this membrane between the cutis and outer lamina of the epidermis of a white man; and yet *this* is the seat of the discoloration produced in his complexion by exposure to the sun. From these examinations, this distinguished naturalist and anatomist was able to pronounce, definitely, that the discoloration in the skin of the white man is *totally different in kind* from the cause of blackness in the negro; he therefore justly concludes, that the negro and the European are separate species of beings.

NEGROES—MANAGEMENT OF UPON SOUTHERN ESTATES.—Some very sensible and practical writer in the March No. of "The Review," under the "Agricultural Department," has given us an article upon the *management of negroes*, which entitles him to the gratitude of the planting community, not only for the sound and useful information it contains, but because it has opened up this subject, to be thought of, written about, and improved upon, until the comforts of our black population shall be greatly increased, and their services become more profitable to their owners. Surely there is no subject which demands of the planter more careful consideration than the proper treatment of his slaves, by whose labor he lives, and for whose conduct and happiness he is responsible in the eyes of God. We very often find planters comparing notes and making suggestions as to the most profitable modes of tilling the soil, erecting gates, fences, farm-houses, machinery, and, indeed, everything else conducive to their comfort and prosperity; but how seldom do

we find men comparing notes as to their mode of feeding, clothing, nursing, working, and taking care of those human beings intrusted to our charge, whose best condition is slavery, when they are treated with humanity, and their labor properly directed! I have been a reader of agricultural papers for more than twenty years, and while I have been surfeited, and not unfrequently disgusted, with those chimney-corner theories (that have no practical result, emanating from men who are fonder of using the pen than the plough-handle) upon the subject of raising crops, and preparing them for market, I have seldom met with an article laying down general rules for the management of negroes, by which their condition could be ameliorated, and the master be profited at the same time. One good article upon this subject would be worth more to the master than a hundred theories about "rotations" and "scientific culture;" and infinitely more to the slave than whole volumes dictated by a spurious philanthropy looking to his emancipation. For it is a fact, established beyond all controversy, that when the negro is treated with humanity, and subjected to constant employment without the labor of thought, and the cares incident to the necessity of providing for his own support, he is by far happier than he would be if emancipated, and left to think, and act, and provide for himself. And from the vast amount of experience in the management of slaves, can we not deduce some general, practicable rules for their government, that would add to the happiness of both master and servant? I know of no other mode of arriving at this great desideratum, than for planters to give to the public their rules for feeding, clothing, housing, and working their slaves, and of taking care of them when sick, together with their plantation discipline. In this way, we shall be continually learning something new upon this vitally interesting question, filled, as it is, with great responsibilities; and while our slaves will be made happier, our profits from their labor will be greater, and our consciences be made easier.

I would gladly avail myself of the privilege of contributing my mite to the accomplishment of this end, by giving my own system of management, not because there is anything novel in it—that it is better, or differs essentially from that of most of my neighbors—but because it may meet the eye of some man of enlarged experience, who will necessarily detect its faults, and who may be induced to suggest the proper corrections, and for which I should feel profoundly grateful. To begin, then, I send you my plantation rules, that are printed in the plantation book, which constitute a part of the contract made in the employment of the overseer, and which are observed, so far as my constant and vigilant superintendence can enforce them. My first

care has been to select a proper place for my "Quarter," well protected by the shade of forest trees, sufficiently thinned out to admit a free circulation of air, so situated as to be free from the impurities of stagnant water, and to erect comfortable houses for my negroes. Planters do not always reflect that there is more sickness, and consequently greater loss of life, from the decaying logs of negro houses, open floors, leaky roofs, and crowded rooms, than all other causes combined; and if humanity will not point out the proper remedy, let self-interest for once act as a virtue, and prompt him to save the health and lives of his negroes, by at once providing comfortable quarters for them. There being upwards of 150 negroes on the plantation, I provide for them 24 houses made of hewn post oak, covered with cypress, 16 by 18, with close plank floors and good chimneys, and elevated two feet from the ground. The ground *wader* and around the houses is swept every month, and the houses, both inside and out, white-washed twice a year. The houses are situated in a double row from north to south, about 200 feet apart, the doors facing inwards, and the houses being in a line, about 50 feet apart. At one end of the street stands the overseer's house, workshops, tool house, and wagon sheds; at the other, the grist and saw-mill, with good cisterns at each end, providing an ample supply of pure water. My experience has satisfied me, that spring, well, and lake water are all unhealthy in this climate, and that large under-ground cisterns, keeping the water pure and cool, are greatly to be preferred. They are easily and cheaply constructed, very convenient, and save both doctors' bills and loss of life. The negroes are never permitted to sleep before the fire, either lying down or sitting up, if it can be avoided, as they are always prone to sleep with their heads to the fire, are liable to be burnt and to contract disease: but beds with ample clothing are provided for them, and in them they are *made to sleep*. As to their habits of amalgamation and intercourse, I know of no means whereby to regulate them, or to restrain them; I attempted it for many years by preaching virtue and decency, encouraging marriages, and by punishing, with some severity, departures from marital obligations; but it was all in vain. I allow for each hand that works out, four pounds of clear meat and one peck of meal per week. Their dinners are cooked for them, and carried to the field, always with vegetables, according to the season. There are two houses set apart at mid-day for resting, eating, and sleeping, if they desire it, and they retire to one of the weather sheds or the grove to pass this time, not being permitted to remain in the hot sun while at rest. They cook their own suppers and breakfasts, each family being provided with an oven, skillet, and sifter, and

each one having a coffee-pot, (and generally some coffee to put in it,) with knives and forks, plates, spoons, cups, &c., of their own providing. The wood is regularly furnished them; for I hold it to be absolutely mean for a man to require a negro to work until daylight closes in, and then force him to get wood, sometimes half a mile off, before he can get a fire, either to warm himself or cook his supper. Every negro has his hen-house, where he raises poultry, which he is not permitted to sell, and he cooks and eats his chickens and eggs for his evening and morning meals to suit himself; besides, every family has a garden, paled in, where they raise such vegetables and fruits as they take a fancy to. A large house is provided as a nursery for the children, where all are taken at daylight, and placed under the charge of a careful and experienced woman, whose sole occupation is to attend to them, and see that they are properly fed and attended to, and above all things to keep them as dry and as cleanly as possible, under the circumstances. The suckling women come in to nurse their children four times during the day; and it is the duty of the nurse to see that they do not perform this duty until they have become properly cool, after walking from the field. In consequence of these regulations, I have never lost a child from being burnt to death, or, indeed, by accidents of any description; and although I have had more than thirty born within the last five years, yet I have not lost a single one from teething, or the ordinary summer complaints so prevalent amongst the children in this climate.

I give to my negroes four full suits of clothes with two pair of shoes, every year, and to my women and girls a calico dress and two handkerchiefs extra. I do not permit them to have "truck patches" other than their gardens, or to raise any thing whatever for market; but in lieu thereof, I give to each head of a family and to every single negro, on Christmas day, five dollars, and send them to the county town, under the charge of the overseer or driver, to spend their money. In this way, I save my mules from being killed up in summer, and my oxen in winter, by working and hauling off their crops; and more than all, the negroes are prevented from acquiring habits of trading in farm produce, which invariably leads to stealing, followed by whipping, trouble to the master, and discontent on the part of the slave. I permit no spirits to be brought on the plantation, or used by any negro, if I can prevent it; and a violation of this rule, if found out, is always followed by a whipping, and a forfeiture of the five dollars next Christmas.

I have a large and comfortable hospital provided for my negroes when they are sick; to this is attached a nurse's room; and when a negro complains of being too unwell to

work, he is at once sent to the hospital, and put under the charge of a very experienced and careful negro woman, who administers the medicine and attends to his diet, and where they remain until they are able to work again. This woman is provided with sugar, coffee, molasses, rice, flour, and tea, and does not permit a patient to taste of meat or vegetables until he is restored to health. Many negroes relapse after the disease is broken, and die, in consequence of remaining in their houses and stuffing themselves with coarse food after their appetites return, and both humanity and economy dictate that this should be prevented. From the system I have pursued, I have not lost a hand since the summer of 1845, (except one that was killed by accident,) nor has my physician's bill averaged fifty dollars a year, notwithstanding I live near the edge of the swamp of Big Black River, where it is thought to be very unhealthy.

I cultivate about ten acres of cotton and six of corn to the hand, not forgetting the little wheat patch that your correspondent speaks of, which costs but little trouble, and proves a great comfort to the negroes; and have as few sour looks and as little whipping as almost any other place of the same size.

I must not omit to mention that I have a good fiddler, and keep him well supplied with catgut, and I make it his duty to play for the negroes every Saturday night until twelve o'clock. They are exceedingly punctual in their attendance at the ball, while Charley's fiddle is always accompanied with Ihurro on the triangle, and Sam to "pat."

I also employ a good preacher, who regularly preaches to them on the Sabbath day, and it is made the duty of every one to come up clean and decent to the place of worship. As Father Garritt regularly calls on Brother Abram (the foreman of the prayer-meeting,) to close the exercises, he gives out and sings his hymn with much unction, and always cocks his eye at Charley, the fiddler, as much as to say, "Old fellow, you had your time last night; now it is mine."

I would gladly learn every negro on the place to read the Bible, but for a fanaticism which, while it professes friendship to the negro, is keeping a cloud over his mental vision, and almost crushing out his hopes of salvation.

These are some of the leading outlines of my management, so far as my negroes are concerned. That they are imperfect, and could be greatly improved, I readily admit; and it is only with the hope that I shall be able to improve them by the experience of others, that I have given them to the public.

Should you come to the conclusion that these rules would be of any service when made known to others, you will please give them a place in the "Review."

A MISSISSIPPI PLANTER.

RULES AND REGULATIONS FOR THE GOVERNMENT OF A SOUTHERN PLANTATION.—1. There shall be a place for every thing, and every thing shall be kept in its place.

2. On the first days of January and July, there shall be an account taken of the number and condition of all the negroes, stock, and farming utensils of every description on the premises, and the same shall be entered in the plantation book.

3. It shall be the duty of the overseer to call upon the stock-minder once every day, to know if the cattle, sheep, and hogs have been seen and counted, and to find out if any are dead, missing, or lost.

4. It shall be the duty of the overseer, at least once in every week, to see and count the stock himself, and to inspect the fences, gates, and water-gaps on the plantation, and see that they are in good order.

5. The wagons, carts, and all other implements, are to be kept under the sheds, and in the houses where they belong, except when in use.

6. Each negro man will be permitted to keep his own axe, and shall have it forthcoming when required by the overseer. No other tool shall be taken or used by any negro without the permission of the overseer.

7. Humanity on the part of the overseer, and unqualified obedience on the part of the negro, are, under all circumstances, indispensable.

8. Whipping, when necessary, shall be in moderation, and never done in a passion; and the driver shall in no instance inflict punishment, except in the presence of the overseer, and when, from sickness, he is unable to do it himself.

9. The overseer shall see that the negroes are properly clothed and well fed. He shall lay off a garden of at least six acres, and cultivate it as part of his crop, and give the negroes as many vegetables as may be necessary.

10. It shall be the duty of the overseer to select a sufficient number of the women, each week, to wash for all. The clothes shall be well washed, ironed, and mended, and distributed to the negroes on Sunday morning; when every negro is expected to wash himself, comb his head, and put on clean clothes. No washing or other labor will be tolerated on the Sabbath.

11. The negroes shall not be worked in the rain, or kept out after night, except in weighing or putting away cotton.

12. It shall be the duty of the driver, at such hours of the night as the overseer may designate, to blow his horn, and go around and see that every negro is at his proper place, and to report to the overseer any that may be absent; and it shall be the duty of the overseer, at some hour between that time and daybreak, to patrol the quarters himself, and see that every negro is where he should be.

13. The negro children are to be taken, every morning, by their mothers, and carried to the houses of the nurses; and every cabin shall be kept locked during the day.

14. Sick negroes are to receive particular attention. When they are first reported sick, they are to be examined by the overseer, and prescribed for, and put under the care of the nurse, and not put to work until the disease is broken and the patient beyond the power of a relapse.

15. When the overseer shall consider it necessary to send for a physician, he shall enter in the plantation book the number of visits, and to what negro they are made.

16. When the negro shall die, an hour shall be set apart by the overseer for his burial; and at that hour all business shall cease, and every negro on the plantation, who is able to do so, shall attend the burial.

17. The overseer shall keep a plantation book, in which he shall register the birth and name of each negro that is born; the name of each negro that died, and specify the disease that killed him. He shall also keep in it the weights of the daily picking of each hand; the mark, number, and weight of each bale of cotton, and the time of sending the same to market; and all other such occurrences, relating to the crop, the weather, and all other matters pertaining to the plantation, that he may deem advisable.

18. The overseer shall pitch the crops, and work them according to his own judgment, with the distinct understanding that a failure to make a bountiful supply of corn and meat for the use of the plantation, will be considered as notice that his services will not be required for the succeeding year.

19. The negroes, teams, and tools are to be considered under the overseer's exclusive management, and are not to be interfered with by the employer, only so far as to see that the foregoing rules are strictly observed.

20. The overseer shall, under no circumstances, create an account against his employer, except in the employment of a physician, or in the purchase of medicines; but whenever any thing is wanted about the plantation, he shall apply to his employer for it.

21. Whenever the overseer, or his employer, shall become dissatisfied, they shall, in a frank and friendly manner, express the same, and, if either party desires it, he shall have the right to settle and separate.

NEGROES—MANAGEMENT OF.—As the proper management of our negroes is a subject not second in importance to any discussed in your columns, I hope it will not be deemed amiss if, in giving my views, I enter somewhat into detail. That on some points I shall be found to differ in opinion from some of your readers and correspondents, is to be expected. I shall not, however, object to any one's ex-

pressing his dissent, provided it be done in the spirit of kindness.

Our first obligation is undoubtedly to provide them with suitable food and clothing. Here the question arises: What is sufficient food? For as there is a difference in practice, there must be also in opinion among owners. The most common practice is to allow each hand that labors, whether man, woman, or child, (for a boy or girl ten years old or over, who is healthy, and growing rapidly, will eat quite as much as a full-grown man or woman,) three and a half pounds of bacon, if middling, or four pounds if shoulder, per week, and bread at will; or if allowed in this also, a peck of meal is usually thought sufficient. With plenty of vegetables, this allowance is quite sufficient; but if confined to meat and bread, negroes who work hard will eat a peck and a half of meal per week.

As I live on my farm and occasionally inspect the cooking for the negroes, I see that they have enough, but nothing to waste; and I speak from personal observation when I state that without vegetables they will eat this quantity.

With very little trouble we can always, during spring and summer, have plenty of cabbage, kale, or mustard for greens, also squashes, Irish potatoes, and beans. In fall and winter, sweet potatoes, turnips, pumpkins, and peas. I believe there is no labor devoted to a provision crop, that pays equal to that bestowed on a plain kitchen garden. As there is no vegetable of which negroes are more fond than of the common field pea, it is well to save enough of them in the fall to have them frequently during the spring and summer. They are very nutritious, and if cooked perfectly done, and well seasoned with red pepper, are quite healthy. If occasionally a little molasses be added to the allowance, the cost will be but a trifle, while the negro will esteem it as a great luxury. As most persons feel a great reluctance at paying out money for little luxuries for negroes, I would suggest the propriety of sowing a small patch of wheat for their benefit. The time and labor will never be missed. Many persons are in the habit of giving out the allowance to their negroes once a week, and requiring them to do their own cooking. This plan is objectionable on various accounts. Unless better provided for taking care of their provisions than is common among negroes, some will steal the meat from others, and the loser is compelled for the remainder of the week to live on bread, or the master must give him an additional allowance. The master cannot expect full work from one who is but partially fed; while, on the other hand, if he will give the loser an additional supply, the negroes soon learn to impose upon his kindness, by being intentionally careless, or by trading off their meat and pretending it has been stolen. Another ob-

jection is that some are improvident, and will get through with their whole allowance of meat before the week is gone, and consequently are a part of their time without any.

To make the negroes do their own cooking, the objections are still more weighty. It encroaches upon the rest they should have both at noon and at night. The cooking being done in a hurry, is badly done; being usually burnt outside while it is raw within, and consequently unhealthy. However abundant may be the supply of vegetables, the hands have no time to cook them, and consequently are badly fed, and have not the strength to do as much labor as they could otherwise perform with comfort.

The plan pursued by the writer is, to weigh out a certain amount of meat for each day, a portion of which is given to the cook every morning, to be boiled for dinner, and with it are cooked as many vegetables and as much bread as the negroes will eat; all of which is usually divided among them by the foreman. In the evening enough is cooked for both supper and breakfast; so that by the time we are done feeding stock, supper is ready, and the hands have only to eat, and they are ready for bed. When the nights are long, the meat for supper and breakfast is sometimes divided without cooking. In addition to the above, the negroes, during spring and summer, usually get plenty of milk once a day. During the fall and winter the quantity of milk is more limited, and what molasses they get, they are made to win by picking cotton.

To make one negro cook for all is a saving of time. If there be but ten hands, and these are allowed two hours at noon, one of which is employed in cooking their dinner, for all purposes of rest that hour had as well be spent in ploughing or hoeing, and would be equal to ten hours' work of one hand; whereas, the fourth of that time would be sufficient for one to cook for all. As there are usually a number of children to be taken care of, the cook can attend to these, and see that the nurses do their duty. I would add that, besides occasional personal inspection, it is made obligatory on the overseer frequently to examine the cooking, and see that it is properly done.

One of your correspondents has endeavored to prove that lean meat is more nutritious than fat. It is, however, a well-known fact that the more exhausting the labor, the fatter the meat which the negro's appetite craves, and it agrees well with him. This I regard as one of the instincts of nature; and think experience is opposed to your correspondent's theory.

As to clothing, less than three suits a year of every-day clothes will not keep a negro decent, and many of them require more. Children, particularly boys, are worse than grown persons on their clothes, and consequently require more of them. I have never

been able to keep a boy, from ten to sixteen years of age, decently clothed with less than four suits a year; nor would that answer, if some of the women were not compelled to do their mending. It is also important that women who work out should, in addition to their usual clothing, have a change of drawers for winter.

As no article of water-proof, suitable for an outer garment, and sufficiently cheap for plantation use, is to be had in the stores, the writer would suggest the propriety of having for each hand a long apron with sleeves, made of cotton osenaburghs, and coated with well-boiled linseed oil. In the fall, when picking cotton, this apron may be worn early in the morning until the dew dries off, then laid aside. By making it sufficiently loose across the breast, it can be used as an overcoat at any time that the negro is necessarily exposed to rain.

Patching may be done by the women on wet days, when they are compelled to be in the house. Or when a breeding woman gets too heavy to go to the field, she may be made to do a general patching for all the hands.

In furnishing negroes with bed-clothes, it is folly to buy the common blankets, such as sell for \$1 or \$1 25. They have but little warmth or durability. One that will cost double the money will do more than four times the service.

Besides whole clothes, negroes should have clean clothes; and in order to do this, they should have a little time allowed them to do their washing. As it is not convenient for all hands to wash at the same time, they may be divided into companies, and a certain evening assigned to each company. Those whose time it is to wash should be let off from the field earlier than the rest of the hands, and on that night should be free from all attention to feeding stock. The rule works equal: for those who have to do extra feeding on one night are in their turn exempt. It should, however, be an invariable rule not to allow any of them to wash on Saturday night, for they will be dirty on the Sabbath, and render as an excuse that their clothes are wet. On some large plantations it is the daily business of one hand to wash and mend for the rest.

In building houses for negroes, it is important to set them well up, (say two and a half or three feet from the ground to the sills,) so as to be conveniently swept underneath. When thus elevated, if there should be any filth under them, the master or overseer, in passing, can see it, and have it removed. The houses should be neat and comfortable; and, as far as circumstances will allow, it looks best to have them of uniform size and appearance; 16 by 18 feet is a convenient size for a small family. If there be many children in a family, a larger house will be necessary.

Many persons, in building negro houses, in order to get clay convenient for filling the hearth, and for mortar, dig a hole under the floor. As such excavations uniformly become a common receptacle for filth, which generates disease, they should by no means be allowed. In soils where the clay will make brick, the saving of fuel, and the greater security against fire, render it a matter of economy to build brick chimneys. In all cases the chimneys should be extended fully two feet above the roof, that there may be less danger in discharging sparks. They are also less liable to smoke. In consequence of negro houses being but one story high, the lowness of the chimneys renders them very liable to smoke from currents of wind driving down the flue. This may be effectually prevented by the following simple precaution: Around the top of the chimney throw out a base some eight or ten inches wide, and from the outer edge of this draw in the cap at an angle of thirty-five or forty degrees with the horizon, until true with the flue. No matter in what direction the wind blows, on striking this inclined plane the current will glance upwards and pass the chimney, without the possibility of blowing down it. On page 454 of Reports of Commissioner of Patents for 1844, will be found plates illustrative of my meaning. The wings of the angles, as explained in reports, are, however, unnecessary, as the remedy is effectual without them, though they evidently increase the draft. A coat of whitewash inside and out, every summer, adds very much to the neat and comfortable appearance of the buildings, and is also, by its cleansing and purifying effect, conducive to health. The cost is almost nothing, as one barrel of good lime will whitewash a dozen common-sized negro houses, and any negro can put it on.

If there be not natural shades sufficient to keep the houses comfortable, a row of mulberries, or such other shades as may suit the owner's fancy, should by all means be planted in front, and so as to protect the houses on the south and southwest.

The negroes should be required to keep their houses and yards clean; and in case of neglect, should receive such punishment as will be likely to insure more cleanly habits in future.

In no case should two families be allowed to occupy the same house. The crowding a number into one house is unhealthy. It breeds contention; is destructive of delicacy of feeling, and it promotes immorality between the sexes.

In addition to their dwellings, where there are a number of negroes, they should be provided with a suitable number of properly located water-closets. These may contribute an income much greater than

their cost, by enabling the owner to prepare poudrette; while they serve the much more important purpose of cultivating feelings of delicacy.

There should at all times be plenty of wood hauled. Surely no man of any pretensions to humanity, would require a negro, after having done a heavy day's work, to toil for a quarter or a half mile under a load of wood before he can have a fire. An economical way of supplying them with wood is to haul logs instead of small wood. This may be most conveniently done with a cart and a pair of hooks, such as are used for hauling stocks to a saw-mill. Such hooks will often come in use, and the greater convenience and expedition of hooks instead of a chain, will soon save more time than will pay for them.

The master should never establish any regulation among his slaves until he is fully convinced of its propriety and equity. Being thus convinced, and having issued his orders, implicit obedience should be required and rigidly enforced. Firmness of manner and promptness to enforce obedience will save much trouble, and be the means of avoiding the necessity for much whipping. The negro should feel that his master is his law-giver and judge, and yet is his protector and friend, but so far above him as never to be approached save in the most respectful manner. That is, where he has just cause, he may with due deference approach his master and lay before him his troubles and complaints; but not on false pretenses or trivial occasions. If the master be a tyrant, his negroes may be so much embarrassed by his presence as to be incapable of doing their work properly when he is near.

It is expected that servants should rise early enough to be at work by the time it is light. In sections of country that are sickly, it will be found conducive to health, in the fall, to make the hands eat their breakfast before going into the dew. In winter, as the days are short and nights long, it will be no encroachment upon their necessary rest to make them eat breakfast before daylight. One properly taken care of, and supplied with good tools, is certainly able to do more work than under other circumstances. While at work, they should be brisk. If one is called to you, or sent from you, and he does not move briskly, chastise him at once. If this does not answer, repeat the dose and double the quantity. When at work, I have no objection to their whistling or singing some lively tune, but no drawling tunes are allowed in the field, for their motions are almost certain to keep time with the music.

In winter, a hand may be pressed all day, but not so in summer. In the first of the

spring, a hand need not be allowed any more time at noon than is sufficient to eat. As the days get longer and warmer, a longer rest is necessary. In May, from one and a half to two hours; in June, two and a half; in July and August, three hours rest at noon. If the day is unusually sultry, a longer time is better. When the weather is oppressive, it is best for all hands to take a nap at noon. It is refreshing, and they are better able to stand pressing the balance of the day. Hands by being kept out of the sun during the hottest of the day, have better health, and can do more work through the season than those who take what they call a good steady gait, and work regularly from morning till night. They will certainly last much longer.

If the corn for feeding is in the shuck, the husking should be done at noon; and all corn for milling should, during summer, be shelled at noon, that as the nights are short, the hands may be ready for bed at an early hour.

If water be not convenient in the field where the hands are at work, instead of having it brought from a distance in buckets, it will be found more convenient to have a barrel fixed on wheels and carried full of water to some convenient place, and let a small boy or girl with a bucket supply the hands from the barrel. Some persons make each negro carry a jug or large gourd full of water to the field every morning, and this has to serve for the day.

During the fall and winter, hands may be made to pack at night what cotton has been ginned in the day. The women may be required to spin what little roping will be necessary for plough lines, and to make some heavy bed-quilts for themselves. Besides this, there is very little that can properly be done of nights.

One of the most important regulations on a farm is to see that the hands get plenty of sleep. They are thoughtless, and if allowed to do so, will sit up late of nights. Some of them will be up at all hours; and others, instead of going to bed, will sit on a stool or chair and nod or sleep till morning. By half-past 9 or 10 o'clock all hands should be in bed; and, unless in case of sickness, or where a woman has been up with her child, if any one is caught out of bed after that hour, they should be punished.

NEGROES—MANAGEMENT OF.—The public may desire to know the age of the writer, the length of time he has been managing negroes, and how long he has tried the mode of management he recommends. It is sufficient to say, I have had control of negroes in and out of the field for thirty years, and have been carrying out my pres-

ent system, and improving it gradually, for twenty years.

I do not deem it needful to follow "A Planter," nor shall I strike a blow at book-farming or theories, as I am an advocate for both, believing that even an error has its advantages, as it will frequently elicit inquiry and a good article in reply, whereas a statement of facts will sometimes pass unnoticed.

Housing for negroes should be good; each family should have a house, 16 by 18 feet in the clear, plank floor, brick chimney, shingle roof; floor elevated two feet above the earth. There should be no loft, no place to stow away any thing, but pins to hang clothes upon. Each house should be provided with a bedstead, cotton mattress, and sufficient bed-clothes for comfort for the heads of the family, and also for the young ones.

Clothing should be sufficient, but of no set quantity, as all will use or waste what is given, and many be no better clad with four suits than others with two. I know families that never give more than two suits, and their servants are always neater than others with even four.

My rule is to give for winter a linsey suit, one shirt of best towelling, one hat, one pair of shoes, a good blanket, costing \$2 to \$2 50, every other year, (or I prefer, after trying three years, a comfort.) In the summer, two shirts, two pair pants, and one straw hat. Several of my negroes will require two pair pants for winter, and occasionally even a third pair, depending mostly upon the material. Others require another shirt and a third pair of pants for summer. I seldom give two pair of shoes.

Food is cooked by a woman, who has the children under her charge. I do not regard it as good economy, to say nothing of any feeling, to require negroes to do any cooking after their day's labor is over.

The food is given out daily, a half pound to each hand that goes to the field, large and small, water carriers and all; bread and vegetables without stint, the latter prepared in my own garden, and dealt out to the best advantage, endeavoring to have something every day in the year. I think four pounds of clear meat is too much. I have negroes here that have had only a half pound each for twenty years, and they bid fair to outlive their master, who occasionally forgets his duty, and will be a gourmand. I practise on the plan, that all of us would be better to be restrained, and that health is best subserved by not over-eating.

My cook would make cotton enough to give the extra one pound. The labor in making vegetables would make another pound. I say this to show I do not dole out a half pound per day from parsimony.

My hours of labor, commencing with pitching my crop, is from daylight until 12 M.; all hands then come in and remain until 3 o'clock P. M., then back to the field until dark. Some time in May we prolong the rest three hours; and if a very hot day, even four hours. Breakfast is eaten in the field, half an hour to an hour being given; or they eat and go to work without being driven in and out—all stopping when my driver is ready.

I give all females half of every Saturday to wash and clean up, my cook washing for young men and boys through the week. The cabins are scoured once a week, swept out every day, and beds made up at noon in summer, by daylight in winter. In the winter, breakfast is eaten before going to work, and dinner is carried to the hands.

I do not punish often, but I seldom let an offense pass, making a lumping settlement, and then correct for the servant's remembrance. I find it better to whip very little. Young ones being rather treacherous in their memory, pulling an ear, or a sound box, will bring every thing right. I am almost afraid I will subject myself to the "chimney-corner theorist's" animadversion if I say more, but I will risk it. Put up a hewed log-house, with a good substantial door, lock and key, story 12 feet high, logs across above, so as to make a regular built jail. Have air-holes near the ceiling, well protected by iron bars. The first negro that steals, or runs away, or fights, or who is hard to manage in order to get a day's work, must be locked up every night as soon as he comes in from work, and turned out next morning; kept up every Sunday. Negroes are gregarious; they dread solitariness, and to be deprived from the little weekly dances and chit-chat. They will work to death rather than be shut up. I know the advantage, though I have no jail, my house being a similar one, yet used for other purposes.

I have a fiddle in my quarters, and though some of my good old brethren in the church would think hard of me, yet I allow dancing; ay, I buy the fiddle and encourage it, by giving the boys occasionally a big supper.

I have no overseer, and do not manage so scientifically as those who are able to lay down rules; yet I endeavor to manage so that myself, family and negroes may take pleasure and delight in our relations.

It is not possible in my usual crude way to give my whole plans, but enough is probably said. I permit no night-work, except feeding stock and weighing cotton. No work of any kind at noon, unless to clean out cabins, and bathe the children when nursing, not even washing their clothes.

I require every servant to be present

each Sabbath morning and Sabbath evening at family prayers. In the evening the master, or sometimes a visitor, if a professor, expounds the chapter read. Thus my servants hear 100 to 200 chapters read each year anyhow. One of my servants, a professor, is sometimes called on to close our exercises with prayer.

Owning but few slaves, I am probably able to do a better part by them than if there were one or two hundred. But I think I could do better if I had enough to permit me to systematize better.

I would keep a cook and a nurse. I would keep a stock feeder, whose whole duty should be to attend to stock in general, to clean out the stable, have troughs filled with food, so that the plough hands would have nothing to do but water, clean down, and tie up the teams. I would build a house large enough, and use it for a dance-house for the young, and those who wished to dance, as well as for prayer-meetings, and for church on Sunday—making it a rule to be present myself occasionally at both, and my overseer always. I know the rebuke in store about dancing, but I cannot help it. I believe negroes will be better disposed this way than any other. I would employ a preacher for every Sabbath. One of my negroes can read the Bible, and he has prayer-meeting every Sabbath at four o'clock P. M.; all the negroes attend regularly, no compulsion being used.

I have tried faithfully to break up immorality. I have not known an oath to be sworn for a long time. I know of no quarrelling, no calling harsh names, and but little stealing. "Habits of amalgamation" I cannot stop; I can check it, but only in the name. I am willing to be taught, for I have tried every thing I know. Yours, truly,

A SMALL FARMER.

P. S.—I endeavor to have regularity on going to bed; forbid sitting or lying by the fire after bed-time. I require fire-makers to be up before day in winter, but forbid getting up before day, trotting off to the field, and waiting for daylight, as some persons are said to do. I forbid my driver from keeping hands in the field when there is an appearance of rain.

My negroes get baits of fresh meat occasionally, but always seasoned high with red pepper. At times I give molasses, sugar, coffee and flour, generally laying out about \$10 per hand for such luxuries.

NEGROES—HOUSES FOR.—One of the most prolific sources of disease among negroes is the condition of their houses and the manner in which they live. Small, low, tight and filthy, their houses can be but laboratories of disease; whilst on every side grow rancorous

weeds and grass, interspersed with fruit trees, little patches of vegetables and fowl-houses effectually shading the ground, and preventing that free circulation of air so essential to the enjoyment of health in a quarter. Your correspondent has frequently detected the presence of worms, and sometimes in large numbers, in negroes inhabiting houses thus conditioned and situated; so often, indeed, that he almost regarded their existence "as a matter of course." Nothing can be so deteriorating to the blood, and consequently to the secretions, as bad air. To be convinced of the truth of this assertion, your readers need but to refer to the "Reports of the Board of Health," in the nearest close-built and ill-ventilated cities and towns, and to the "sick lists" of hospitals, jails, and ships. That fatal form of febrile disease, denominated "ship fever," though, to some extent, modified, has occurred repeatedly in negro houses. Not to contend for, in all probability, an admitted point, then, it may be concluded that it is important that planters should adopt some system or rule under the operation of which their negro houses shall be properly constructed, their quarters adequately ventilated and dried, and the manner of living among their negroes regulated.

It is a common custom with negroes to return in the evening from the field tired, and often in a perspiration, and lie down before their doors upon a board or bench, and sleep till nine or ten o'clock, while the dew is falling and the atmosphere becomes cool and damp; instead of going into their houses and either lying down in bed or before a gentle fire, where the exhalation from the skin would be more gradual, and that chilliness consequent upon their sudden "cooling" would be avoided. Let planters go at this hour around their quarters, and feel the hands and feet of negroes thus conducting themselves, and they will no longer be in doubt as to the source of their "chills and fevers." Now, it is not the wish of your correspondent to interfere with the household and domestic arrangements and affairs of negroes, nor to destroy their gardens and patches, to allow them which is all very proper; but when they will not have "an eye to health" themselves, it is to the interest of their owners to have an eye for them.—*Southern Cultivator*.

NEGROES.—BLACK AND MULATTO POPULATION OF THE SOUTH.—The Hon. Mr. Clingman, of North Carolina, has addressed a letter to the census board, urging the importance of more accurate information than has hitherto been elicited with reference to the black race, and especially to that portion of it in which there is a mixture between the black and white races. The last census was notoriously faulty in this respect, and, owing to the conflicting extremes of opinion and assertion

which have been adduced by the parties who are associated most intimately with the interests of the negro population, nothing like a true knowledge of the state of the black race in the United States has been arrived at. In the south, the negro is described as hardly human—incapable of refinement or intellectual advance; while the abolitionists extol him as naturally the equal of the white man, physically and mentally. So that it is a mooted question whether slavery has degenerated, or freedom at the north has improved the negro.

It appears at all events certain, that the mixed race exhibits powers more susceptible of cultivation than the pure African. They are selected at the south for the performance of duties requiring higher capacities than are possessed by the mere field negro; and at the north, every day's observation shows that the mulatto is endowed with mental gifts superior to his black brother. But whether the mulatto deteriorates physically in proportion as he ascends in the intellectual scale, is the question of the highest importance, considering the ratio in which this portion of our population is increasing.

It has been lately asserted, by men who have made this branch of science their study, that the hybridity of animals is, in course of time, fatal to their powers of procreation; and that after two or three generations, the mulatto (the hybrid man) loses this power as does the mule. This theory argues a diversity of the human race, and is of course violently opposed by the advocates of its unity; but hypothesis and controversy are alike powerless to elucidate a truth which depends upon statistics for its developments. Hence the importance of Mr. Clingman's suggestion to ascertain not only the number of all such persons, whether free or slaves, of extending inquiries as to the parents of the mulatto population, whether they were black, white, or mixed—and going on still further back, where necessary, until the pedigree is traced back to the individual white and black races. In connection with this subject, a writer in the Boston "Medical Journal" states the following facts, which are said to have been collected from authentic statistics:

1. That the longevity of the pure African is greater than that of the inhabitants of any other portion of the globe.
2. That the mulattoes (i. e. those born of parents, one being African and the other Caucasian, or white) are decidedly the shortest lived of any class of the human race.
3. That mulattoes are more liable to die under the age of twenty-five, than the whites or blacks between these ages; from forty to forty-six, 60 to 1; and from fifty-five to seventy, 100 to 1.
4. That the mortality of the free people of color in the United States is more than one

hundred per cent. greater than that of the slaves.

It is questionable whether the negro will care about a change to freedom, if its only benefit is a *short cut to the grave*. There is no question but slavery is an evil, but statistics of mortality prove that, as far as the negro is concerned, poverty is *one hundred fold* the greater evil.

The abolitionists seem always to be unacquainted with one fact—that the relation between master and slave was one of the first and most universal forms of property and servitude in the world. Mr. Calhoun may be sneered at by some of the long-eared Solomons of the northern press, but his arguments on this subject have never yet been answered. He says truly that the slave property is so ancient that there is no record of its origin. It is probably more ancient than separate and distinct property in lands, and quite as easily defended on abstract principles. So far from being created by positive enactment, I know of no instance in which it ever was, or to express it more accurately, in which it had its origin in acts of legislatures. It is always older than the laws which undertake to regulate it, and such is the case with slavery as it exists with us. They were for the most part slaves in Africa—they were bought as slaves, brought here as slaves, sold here as slaves, and held as slaves, long before any enactment made them slaves. I even doubt whether there is a single state in the south that ever enacted them to be slaves. There are hundreds of acts that recognize and regulate them as such; but none, I apprehend, that undertake to create them slaves. Master and slave are constantly regarded as preëxisting relations.

NEGROES.—EMPLOYMENT OF IN COTTON FACTORIES.—A writer in the Augusta Constitutionalist takes this enlightened view of the subject:

"The blacks comprise a large portion of the population of the south. They are an inferior race, and *dependency is their inheritance*. No mistaken philanthropy or wild theories can change slavery as it exists in the southern states. It is the condition in which the blacks can be best comforted and provided for. It is truly gratifying, therefore, to witness the awakening of late to these truths. The triumph of sound practical sense and reason over the past hallucinations and impracticable speculations of one, whose lead Kentucky was wont, hitherto, to follow, imparts an instructive lesson to the whole south. We will, it is to be hoped, profit and set ourselves steadily to work to *preserve* and render slavery what Providence designed it to be, a blessing and comfort to the African heathen. The blacks constitute, to a great extent, the laboring class of the south, and beyond this they cannot,

and have not, the aspirations to rise. As in all other countries, there is an obligation imposed to provide for the laboring classes. Indeed, this is the all-absorbing subject of statesmen under every government, however constituted. With us this obligation devolves upon the master, the owner of the slave; and if he cannot employ the negro profitably in one pursuit, his own sagacity and interests should be left free to divert gradually his physical energies into other channels of productive labor. The African has an aptitude for endurance, and at the south will succeed in many of the laborious operations where others would fail. For manufacturing in the hot and lower latitudes, they are peculiarly qualified; and the time is approaching when they will be sought as the operators most to be preferred and depended on. If our object in embarking in manufactures is to avail ourselves of our natural advantages, and thus counteract the incessant and vexatious attacks of the north, we cannot more effectually accomplish this than by the introduction of African slaves into factories. They are more manageable, more pliable, and can best endure the heated atmosphere of a confined room—to which hundreds of the whites are daily falling victims. The hackling, or preparing and sising apartments, hurry many white operators to premature graves. I do not speculate on this subject; facts every where sustain me as to the sufferings and mortality in the one case, and as to the peculiar *qualities in the other*. I could name factories in South Carolina, Alabama, and Georgia, where the success of black labor has been encouraging; but the recent public acknowledgment of the director of the Saluda factory, near Columbia—a northern man, and who took charge with northern prejudices—is conclusive.

"It is not, however, merely the adaptation of black slave-labor to manufacturing, that would make me an advocate of its employment.

"I take a wider range, and am influenced by a more enlightened policy. Our blacks compose one half of the population of the southern states, and, from very obvious causes, are increasing with a rapidity far beyond the other races. We have to make provision for them. The obligation to protect, to feed, to clothe, and take care for in sickness and in health, in want and in tribulation, is sacred with the master. He should not be prohibited, therefore, from directing their labor to any object in which they may be profitably employed. The African is equal to any operation which involves enduring labor under a tropical sun; and any attempt to restrict or limit him to one pursuit, would be fatal to the institution of slavery, and an infringement on the rights of those on whom has devolved the responsibility of taking care of dependants."

—The following statistics of the slave trade at Charleston, from 1804 to 1807, are taken from the speech of the Hon. Judge Smith, senator from South Carolina, delivered in the Senate of the United States on 8th December, 1820:

"In the year 1804, the ports of South Carolina, by an act of its Legislature, under the permission of the constitution of the United States, were opened for the importation of Africans. They remained open four years. During that time there were two hundred and two vessels entered the port of Charleston, with African slaves." * * *

"He wrote to a friend in Charleston, to apply to the custom-house officers for a full statement of all the ships engaged in that trade during the four years."

* * * In answer to his request, he had received from the custom-house books, from the hand of the collector, the following authentic documents:"

Vessels.	1804.	Country of the Proprietors of the Cargo.
Aurora.....	New-England	
Ann.....	Scotland	
Easter.....	"	
Brilliant.....	Rhode Island	
Armed Neutrality.....	Great Britain	
Argo.....	Ireland	
Thomas.....	Great Britain	
Horizon.....	"	
Harriet.....	"	
Eliza.....	"	
Alexander.....	"	
Francia.....	"	
Christopher.....	"	
Favorita.....	"	
M'Leopine.....	"	
Susanna.....	New-England	
Active.....	Great Britain	
Hamilton.....	"	
Ruby.....	"	
Mary.....	"	

	1805.	
Perseverance.....	Great Britain	
Kitty.....	Charleston	
Lupin.....	Rhode Island	
Mary Huntley.....	Great Britain	
Gov. Wentworth.....	"	
Experiment.....	"	
Eagle.....	Rhode Island	
Neptune.....	"	
Fanny.....	Great Britain	
Thomas.....	"	
Nile.....	"	
Recourse.....	"	
Isabella.....	"	
Armed Neutrality.....	"	
Susanna.....	"	
Love and Unity.....	Rhode Island	
Jack Park.....	Great Britain	
Manning.....	"	

1805 continued.

Juliet.....	Rhode Island
Margaret.....	Great Britain
Louisiana.....	Rhode Island
Ariel.....	Great Britain
Estor.....	"
Margaret.....	"
Hiram.....	Rhode Island
Louisiana.....	"
Maria.....	Great Britain
Hambleton.....	"
Rambler.....	Rhode Island
William.....	Great Britain

1806.

Ariel.....	Great Britain
Mary.....	"
Daphna.....	"
Caris.....	"
America.....	"
Davis.....	"
Lydia.....	New-Jersey
Dutton.....	Great Britain
Amazon.....	"
Fair American.....	Rhode Island
Miller.....	Ireland
Edward and Edmund.....	Great Britain
Factor.....	Rhode Island
Louisa.....	"
Commerce.....	"
Gustavus.....	Charleston
Neptune.....	Rhode Island
Robert.....	Great Britain
Polly.....	Rhode Island
Hiram.....	"
Samuel.....	New-Jersey
Love and Unity.....	Rhode Island
Three Sisters.....	"
Hector.....	Great Britain
Ruby.....	"
Farmer.....	"
Maria.....	Rhode Island
Ceres.....	Great Britain
Independence.....	Rhode Island
Hibernia.....	Great Britain
Alert.....	"
Agent.....	Rhode Island
Mary.....	Great Britain
Three Friends.....	"
Fair Eliza.....	"
Fox.....	Rhode Island
Kitty.....	Charleston
Hope.....	Rhode Island
Hope.....	Ireland
Nantasket.....	Great Britain
John Watson.....	"
Gov. Dodsworth.....	"
Mary Ann.....	"
Diana.....	"
Davenport.....	New-Jersey
Corydon.....	Great Britain
Kate.....	"
Mercury.....	"
Union.....	"
Washington.....	"

1804 continued.

Louisa.....	Rhode Island
Nicholson.....	Great Britain
Edward and Edmund.....	"
Mercury.....	"
Little Ann.....	Charleston
Margaret.....	Great Britain

1807.

Katy.....	Great Britain
James.....	"
Eliza.....	Rhode Island
Cleopatra.....	Great Britain
Union.....	Rhode Island
Tartar.....	Great Britain
Maria.....	"
James.....	Massachusetts
Mary.....	Rhode Island
Aspinal.....	Great Britain
James.....	Charleston
Norfolk.....	Ireland
Fourth of July.....	Charleston
Dodder.....	Great Britain
Habit.....	France
Agent.....	Rhode Island
Eliza.....	Great Britain
Ann.....	"
Ellis.....	"
Andromache.....	Rhode Island
Gov. Clairborne.....	France
Hiram.....	Rhode Island
Semiramis.....	"
Neptune.....	"
Nancy.....	"
Minerva.....	France
Columbia.....	Rhode Island
Factor.....	"
Lavinia.....	"
Leander.....	"
Daphna.....	Great Britain
Vulture.....	Rhode Island
Africa.....	Great Britain
Three Friends.....	"
Eliza.....	Rhode Island
Lark.....	"
Alfred.....	"
Louisa.....	Great Britain
Hiram.....	Rhode Island
Concord.....	"
Friendship.....	Rhode Island
Flora.....	"
Ann and Harriet.....	"
Monticello.....	"
Amazon.....	Great Britain
Baltimore.....	Rhode Island
Juliet.....	"
Miriam.....	France
Heron.....	Ireland
Ruby.....	Great Britain
Three Sisters.....	Rhode Island
Betsy and Sally.....	"
Armed Neutrality.....	Great Britain
Anna.....	France
John.....	Great Britain
Nantasket.....	"

1807 continued.

Gov. Clinton.....	France
Eagle.....	Rhode Island
Port Mary.....	Great Britain
Eliza.....	Charleston
Mary.....	Rhode Island
Eagle.....	"
Actor.....	Ireland
Hannah Bartlet.....	Rhode Island
Mary.....	"
Edward and Edmund.....	"
Charleston.....	Great Britain
Experience.....	Rhode Island
Rambler.....	"
Eliza.....	"
Cleopatra.....	Great Britain
Hope.....	Rhode Island
Charlotte.....	"
Albert.....	S. Carolina
Commerce.....	Rhode Island
Hope.....	Massachusetts
Wealthy Ann.....	Rhode Island
Columbia.....	"
Angenora.....	"
Mercury.....	Ireland
Venus.....	Rhode Island
Agent.....	France
Gen. Clairborne.....	"
James.....	Rhode Island
Resolution.....	Great Britain
William and Mary.....	"
Caroline.....	France
Polly.....	Charleston
Jupiter.....	Great Britain
Heart of Oak.....	Rhode Island
Horizon.....	"
Mary Ann.....	"
Mary Ann.....	"
Rio.....	Charleston
Sally.....	"

RECAPITULATION

Of the African trade, and by what nations supported, from 1st January, 1804, to 31st of December, 1807.

Vessels belonging to	
Charleston.....	61
Rhode Island.....	59
Baltimore.....	4
Boston.....	1
Norfolk.....	2
Connecticut.....	1
Sweden.....	1
Britain.....	76
France.....	8
Total.....	202
Consignees.	
Natives of Charleston.....	18
" Rhode Island.....	88
" Britain.....	91
" France.....	10
Total.....	202

Whole number of slaves imported, and the particular number imported by each foreign nation, and each of the United States (into Charleston.)

British.....	*19,649
French.....	*1,078

21,027

IN AMERICAN VESSELS.

Charleston, South Carolina, belonging to foreigners.....	5,107
Imported by merchants and planters of Charleston and vicinity.....	2,006

7,723

Bristol, . . . 3,914	} Rhode Island.....	8,228
Newport... 3,488		
Providence. 556		
Warren.... 280		
Baltimore.....		750
Savannah.....		800
Norfolk.....		387
Hartford.....		250
Boston.....		200
Philadelphia.....		200
New-Orleans.....		100

18,048

Total.....39,075

NOTE BY THE COMPILER.

It would appear, from the foregoing, that of these importations of slaves into Charleston, there were imported by natives of countries and places now repudiating slavery,

Foreigners.....	21,067
Citizens of United states.....	14,605

35,632

By citizens of slaveholding states.... 3,443

Total.....39,075

NEGRO CIVILIZATION AND THE DOMINICAN REPUBLIC.—A writer in the New-York Journal of Commerce furnishes the following interesting and important information in relation to the Republic of St. Domingo, in the island of Hayti:

"The island of St. Domingo formerly belonged, the eastern part to Spain, the western part to France. Under a low system of morality, a considerable population of free people of color had sprung up in the French part of the island when the French revolution began. One of the early results of that revolution was

the decree of the Constituent Assembly of France, of the 15th of May, 1791, declaring that men of mixed blood of all shades, born of free persons, should be admissible to the colonial assemblies. This admission of free people of color to a political equality with themselves was resisted by the white inhabitants, who, rather than submit thereto, made proposals to Sir Adam Williamson, then Governor of Jamaica, to place the island, or rather the French part of it, under British protection. Their propositions were accepted, and a British force sent to occupy the posts of Jeremi and St. Nicolas Mole. Santhomas, the French commissioner, alarmed at the prospect of the colony falling into the hands of Great Britain, proclaimed the general emancipation of all the slaves. This was followed by a coalition of the free people of color with the blacks, to murder and drive out the whites. The atrocities committed on tottering age, helpless infancy, and feeble womanhood, have given to the island a terrible interest.

The people of color, who united with and encouraged the blacks in these atrocities, have since met with their merited punishment in the oppression, banishment, and massacre of which they have in turn become the victims.

It is a great error into which many have fallen, to suppose that the inhabitants of the eastern or Spanish part of the island had any part in these scenes of vice and crime, and which have rendered infamous the very name of that beautiful island. Those excesses were confined entirely to the French part. The Spanish part of the island remained undisturbed, and, until 1821, in quiet submission to Spain, of whose colonies it was, in climate, soil, and mineral productions, perhaps the most valuable, though most neglected. Overlooked and neglected by the cabinet at Madrid, and their only source of prosperity, their commerce with the other Spanish American colonies, being cut off by the revolt of those colonies, in December, 1821, the Dominicans declared their independence of Spain, and, hoisting the Colombian flag, sent commissioners to ask admission as one of the states of the Colombian Republic. That Republic was at that time too much engaged in the organization of its own government and affairs at home, to attend to the application of the Dominicans. Spain, engaged with her other colonies, left the Dominican revolutionists to themselves. Boyer, then President of Hayti under pretence of marching to their assistance, took possession of the country. The Dominicans, few in number and unprepared for resistance, were compelled to submit, and found that they exchanged the neglect and the restrictive commercial policy of Spain, for the far more oppressive tyranny of the blacks. Under this yoke they suffered till 1843. In that year, driven by desperation, a few persons, not over a hundred, rose in the night

* There is a typographical error of 300 in one of these two amounts in the original pamphlet, which we have not felt authorized to alter, as it was doubtful in which amount to make the alteration.

and took possession of the principal gates of the city of St. Domingo. By the influence of some of the foreign residents, whose sympathies were with them, and who went between them and the Haytian garrison in the citadel, exaggerating their numbers and strength, the garrison was induced to surrender before morning came to disclose the weakness of the movement. As fast as the unexpected news spread through the country, the Dominicans flocked to the standard of independence, drove out the Haytiens, and established a republican form of government.

The Dominican Republic contains from 150,000 to 200,000 souls. The Haytiens number from 800,000 to 1,000,000. The latter admit no white person to hold any real estate, or enjoy any of the privileges of a citizen. The former is essentially a white government, with about the same intermixture of other blood as in the Spanish Main and Brazil. The government always has been, and still is, in the hands of the whites. The immigration of blacks is prohibited, and white colonists are invited by grants of lands, the government paying their expenses and subsistence till established in their new homes.

The Dominicans have made repeated applications to the United States to interfere, to put an end to the invasions of the blacks. Learning that such an application had been made, the English, to anticipate the tardy action of our slower-moving government, proffered their mediation. The Dominicans, suspicious of the negrophily of England, hesitated to accept the offer, lest their doing so might afford a pretext for English influence to compel them to submit to the black Emperor Souloque. The offer was therefore accepted only on the condition that the United States and France should join in the mediation.

The celebrated society of the "Amis des Noirs" was established about the commencement of the French revolution, for the purpose of ameliorating the condition of the black population in the West Indies. Its leading members were Brissot, Pétion, Mirabeau, Clavière, Condorcet, and most distinguished of all, the Abbé Grégoire. To their misdirected zeal may be attributed all the crimes and horrors which have desolated the island of San Domingo, reduced its inhabitants to a condition of slavery far worse than that which it was proposed to improve, and plunged them again into barbarism and idolatry.*

This society still exists in Paris, largely increased in numbers and influence, and acts in concert with the abolition societies of Great Britain and the United States. Adopting their views of humanity—that it is much better that the Haytiens should have undisputed

possession of the whole, than that the island should be divided between two constantly conflicting governments—England and France have been for some time endeavoring to procure the submission of the Dominicans to Souloque. We have recently been informed that this view of the subject has also been adopted by the government of the United States, and that a special agent is about to sail in the *Saranac* to unite with the French and English agents to accomplish this object.

If these rumors be true, and the Dominican Republic should thus be fused down into a province of the Haytian empire, past experience plainly points out what will be the unhappy fate of its white inhabitants."

NEGROES OF ANCIENT TIMES —

Six:—From a learned work, printed a short time since, entitled "*Anacalypsis*," and written by the late Godfrey Higgins, I have made some extracts which relate to a portion of the early history of our race, and, as I conceive, bear reference to a part of the inhabitants still existing on our globe.

This communication, though not *strictly* of a medical nature, yet may be deemed replete with interest, as connected with those extensive views which our science naturally embraces. Truly appertaining to the natural history of man, upon which subject your columns at various periods are pregnant with information, viewing it in its physical and moral aspects, I trust it will be thought that this article has not intruded into a quarter which might have been more legitimately and more profitably occupied. May I therefore request its insertion in your widely-diffused periodical, in the hope that some of the scientific readers of *The Lancet*, whose investigations have been directed towards such matters, may be enabled to adduce some arguments, or disclose some facts, tending to elucidate the apparent inconsistency, or altogether to remove the presumed resemblance?

EXTRACTS.—1. It was the opinion of Sir William Jones, that a great nation of *blacks* formerly possessed the dominion of Asia, and held the seat of empire at Sidon. These must have been the people called by M. Marice "Cushites," or "Outhites," described in *Genesis*; and the opinion that they were blacks is corroborated by the translators of the Pentateuch, called "the Seventy," constantly rendering the word "Cush" by "Ethiopia."

2. "The religion of Buddha, of India, is very ancient, as well known. In the most ancient temples scattered throughout Asia, where his worship is yet continued, he is found *black as jet*, with the flat face, thick lips, and curly hair of the *negro*. Several statues of him may be met with in the museum of the East India Company. There are two exemplars, brooding on the face of the deep upon a coiled serpent. To what time are

* Many of the blacks of Hayti have lapsed into idolatry, worshipping serpents and other *Fétiches*.

we to allot this negro? He will be proved to have been prior to the god called 'Cristna.' He must have been prior to, or contemporaneous with, the black empire, supposed by Sir W. Jones to have flourished at Sidon. The religion of this negro god is found, by the ruins of his temples and other circumstances, to have been spread over an immense extent of country, even to the remotest part of Britain.

8. "Eusebius states that the Ethiopians settled in Egypt in the time of Amenophis; they came from the river Indus, and planted themselves south of Egypt.

4. "Philostratus says, that the gymnosophists of Ethiopia, who settled near the sources of the Nile, descended from the Brahmins of India, having been driven thence for the murder of their king.

5. "Eustasius also states, that the Ethiopians came from India.

6. "The superior antiquity of India is shown by Baily, and many other learned men.

7. "The Ethiopians are stated by Herodotus to have come from the Indus. Memnon, who was sent to the siege of Troy, and was killed by Achilles, Virgil describes as having been a black, (*Æneid*, lib. i.) as does also Pindar, (*Olymp.* Od. ii.; *vide* Diss. of Bishop Hewet, ch. xiii., p. 185.) That Pindar and Virgil were right, the features of the bust of Memnon in the British Museum prove, for they are evidently those of the negro.

8. "Mr. Wilsford, in his treatise on Egypt and the Nile, in the 'Asiatic Researches,' informs us that many very ancient statues of the god Buddha, in India, have *crisp curly hair*, with *flat noses* and *thick lips*. Nor can it reasonably be doubted that a race of negroes formerly had power and pre-eminence in India. This is confirmed by M. Maurice, who says, 'The figures in the Hindoo caverns are of a very different character from the present race of Hindoos: their countenances are *broad and full*, the *nose is flat*, and the *lips*, particularly the *under lip*, are *remarkably thick*.'

9. "This is again confirmed by Col. Fitzclarence in his journal; and Maurice, in the first volume of his *Indian Antiquities*, states that the figures in the caves of India are *absolutely the same as those in Egypt described by Bruce, Niebuhr, &c.*

10. "Justin states that the Phœnicians, being obliged to leave their native country in the east, they settled first near the Persian Gulf; and Maurice says, 'We find an extensive district, named Palestine, to the east of the Euphrates and Tigris. The word Palestine seems derived from *Pallisthan*, the seat of the Pallis, or Shepherds; *Pali* in India means *Shepherd*. This, coupled with the Shepherd Kings of Egypt, confirms Sir W. Jones's opinion in a striking manner, respecting a black race having reigned at Sidon.

11. "Sir W. Jones says, 'The mountaineers of Bengal and Bahar can hardly be distinguished in some of their features, particularly in their *lips* and *noses*, from the modern Abyssinians, whom the Arabs call the children of Oush.'

12. "In my essay on Celtic Druids, I have observed that a great nation called 'Celtæ,' of whom the Druids were the priests, spread themselves over almost the whole earth, and are to be traced in their rude gigantic monuments from India to the extremity of Britain. What these can have been but the early individuals of the *black nation*, of whom we have been treating, I know not, and in this opinion I am not singular. The learned Maurice says, 'Outhites, i. e., Celts, built the great temples in *India* and *Britain*, and excavated the caves of the former.' And the learned mathematician, Reuben Burrow, has no hesitation in pronouncing Stonehenge to be a temple of the black curly-headed Buddha."—P. 52.

If it can be admitted, with the learned author from whom I have quoted, that the most ancient race of which we have any record, either in the pages of history, or in the gigantic cavern sculptures of the east, or in the traditional legends, were *black*, and in physical conformation and visible aspect similar to the race of negroes which at present exists, by what means can we account for the degraded condition of the latter! How reconcile the vast intellectual distinction between them!

I think it will be readily allowed that the negro nation, so far as we are acquainted with them, are fitted, neither by physical capabilities nor by moral attributes, to become the founders or rulers of great kingdoms. We perceive that year after year, and century after century, to them brings no change. We observe that their habits and their customs remain unaltered; that in no respect do their intellectual endowments appear to advance with the experience of years; and the most that can be stated in their favor is this, that they have remained stationary from the period of their first introduction to civilized man. How, then, were their presumed predecessors enabled to assume so commanding a situation, to attain so proud an elevation among the empires of the world! By what means did they arrive at such eminence in scientific knowledge and mechanical ingenuity! In what manner did they extend their fame and influence into almost every region, however remote!

A query naturally suggests itself. Can the existing African negroes be the descendants of this widely-spread, intelligent, and refined race? Can the beings so low in the scale of intellect as the negro is represented to us to be, be connected by consanguinity with this exalted people! If it be answered in the negative, where—to what country—shall we

look for their continuance! Where are their descendants in skill, knowledge, and refinements, possessing the same external physical conformation!

If the query which I have above suggested be answered in the affirmative, to what chain of causes are we to affix the great debasement of the present existing negro! To what source are we to turn for satisfactory reasons for such a manifest and striking difference in the intellectual endowments and sagacious actions of the same people of two different periods!

Without presuming to offer an opinion, but merely to afford a hint for investigation, I would ask, whether the solution of the difficulty can be advanced by the following attempt at explanation! A succession of conquests, with other political and social causes combined, forced these black descendants of the Pahi, or India-Egyptian shepherd kings, and the tribes belonging to them, to emigrate progressively further into the interior of the vast continent of Africa, where at length they find a secure and unmolested haven from their toils and sufferings, unworthy of the ambition and uninviting to the cupidity of their neighbors. The intense heat of the climate, the sterility of the soil, and the unimprovable appearance of the whole face of the country, would be sufficient to ward off all intruders, whether hostile or commercial. Remaining for centuries in this isolated condition, they continued a distinct and unmixed race. The powerful stimuli of foreign war, of commercial intercourse, of social improvement, being absent, their minds became contracted and weak. Succeeding generations, adding to the stolidity of their progenitors, became still more depressed in mental energies, and after the lapse of many ages, they reached the degraded and melancholy condition which they now exhibit. Finally, having little or no intercourse with the rest of mankind, and a very limited range for the exercise of their intellectual and moral faculties, the gradual disuse of those powers which were originally planted in them, may have created that result on their cranial configuration and intellectual manifestations, which, under somewhat analogous circumstances, phrenologists have frequently observed. I remain, sir, your ever-instructed reader.

OHIO—COMMERCE, RESOURCES, &c., OF—

The state of Ohio, which was admitted into the American Union in 1802, has become already, through the fertility of its soil and the energy and thrift of its people, one of the most important members of that Union, both in wealth and in population, and exercises a degree of influence on our federal councils second only to that of the great states of New-York and Pennsylvania.

The admirable message of Governor Bart-

ley, delivered 8th December last, affords us a vast amount of information in reference to the internal condition, resources and prosperity of the state; and feeling, as we naturally do in Louisiana and in New-Orleans, the liveliest interest in the welfare of a community with whom our commercial relations are so intimate, it is impossible that a few pages in our Review could be better occupied than with a few of the facts presented by the governor, and obtained from other reliable sources. The design of the Review is to treat from month to month of each of the states of the south and west, in a similar manner, and ultimately of the states of the whole Union, thus furnishing a body of information of incalculable value for present use and future reference. If the citizens of different states, who have the means of information at hand, would aid us in any way in the enterprise, the service we cannot doubt would be universally appreciated.

The first permanent settlement in Ohio was made in 1788, at Marietta. French settlers afterwards were located at Gallipolis in 1791. Cleveland was settled in 1791 by emigrants from New-England. From this humble beginning has grown up in half a century a powerful state!

In the construction of her numerous public works the state of Ohio has contracted a large public debt, the interest upon which, however, she has always met with great and commendable punctuality. According to the governor's statement the debt is:

Total Foreign,	\$16,964,292 50
Total Domestic,	765,186 12
School and Trust Fund,	1,482,682 68

Total debt, \$19,212,111 80

The returns of property valuations in the state for purposes of taxation were, in 1845,

	Valuation.
Acres of land,	23,216,286 \$85,916,169
Town property,	22,269,575
Number of horses, 387,200 a \$40	15,488,000
“ cattle, 725,253 a 8	5,786,824
Capital in trade and at interest,	13,556,517
Carriages for pleasure,	1,055,742
Stages and stage stock,	87,762

\$144,160,469

The following table will exhibit the increase in population:

1802,	50,000		
1810,	230,760	Increase in 8 years,	180,760
1820,	581,434	“ 10 “	350,674
1830,	937,679	“ 10 “	356,245
1840,	1,515,161	“ 10 “	577,482

Total increase in 38 years, .. 1,465,165

Average increase per year, .. 38,557

Estimated population in 1845, over 3,000,000.

The agricultural capacities of Ohio are unlimited. We learn from a paper prepared by John Brough, Esq., that the valleys of the Scioto and Miami are extensively cultivated in corn, oats, and as meadow lands. Large bodies of these lands are quite level, and the soil is of a rich, deep, and durable character. There are probably no better corn grounds in the Union. In many instances, fields have been cultivated in this crop for forty years in succession, without any evidence of failure in the soil. In the valley of the Scioto, and the territory lying between that and the Miami, there is raised and fattened a great number of cattle, most of which are sent to the eastern markets. Both these valleys—the Scioto and the Miami—are famous for the number and the quality of their hogs.

TOTAL AGRICULTURAL PRODUCTS OF OHIO
IN 1844.

		Value.
Bushels of wheat, ..	15,969,000	\$9,581,400
“ “ barley,....	191,000	114,600
“ “ oats,....	20,993,000	3,058,950
“ “ rye,	840,000	504,000
“ “ buckwheat, ..	792,000	475,020
“ “ corn,	48,000,000	9,600,000
“ “ potatoes, ..	4,847,000	1,211,750
Tons “ hay,	1,876,000	11,256,000
“ “ flax & hemp, ..	1,000	60,000
Pounds “ tobacco, ...	6,888,000	275,520
“ “ silk cocoons, ..	31,500	126,000
“ “ sugar,	4,380,000	306,600

Making a total of \$36,570,020

This statement does not embrace the pork, beef-cattle, horses, over and above the usual stock, sheep, wool, butter, cheese, and divers other items, which, it is safe to say, if they could be in any wise correctly ascertained, would swell the value of the agricultural products of Ohio to at least forty-five or fifty millions of dollars annually. Governor Thomas W. Bartley, in his Message to the General Assembly, in December, 1844, estimated the whole products of the state as follows:

	Value.
Agricultural,	\$45,362,400
Manufactures,	17,505,600
Commerce,	9,660,379
Mineral,	2,981,218
Forest and lumber,	1,013,063
Fisheries,	10,525

Total, \$76,483,188

MANUFACTURES OF OHIO.—At Steubenville—cotton, woollen, iron; coal in the vicinity. At Mount Pleasant—silk, the raw material of which raised in the state; culture encouraged by state bounties. Zanesville—iron works. Dayton contains many cotton and woollen factories, cotton, paper and flouring

mills, &c. Akron and Cincinnati both contain rising and growing manufactories. The state has great facilities for these purposes.

MINERALS OF OHIO.—Bituminous coal in large quantities; valued in Cincinnati at about twelve cents per bushel. Salt is obtained abundantly from water yielded by boring, and extensive works have been constructed. Iron ore exists also in large quantities.

“The mineral wealth of Ohio is not, and will not be for many years to come, fully developed. The remark that has been made in regard to our manufacturing advantages, may be applied here with equal force. There is no lack of enterprise among our people; but they do not possess the capital necessary to call forth into active exercise and usefulness these mighty treasures of the earth. Perhaps no state in the Union offers greater inducements to the investment of capital, in this particular, than the state of Ohio. There is here that rare combination so seldom met with, of iron ore, coal, and water power, not only in the same districts, but in the immediate vicinity of each other. The state, in her corporate capacity, has done all that justice requires, or her means will justify. In all these districts, abounding in mineral wealth, canals and other public works have been constructed, and are now in successful operation; thus adding to the advantages already enumerated the facilities of transportation to every other section of the state, and an outlet to the markets of the world. The day cannot certainly be far distant, when these signal advantages will attract the attention of capitalists; and then the mineral wealth of Ohio, in its development, will rank the state as high in that particular as she now stands in the vast amount and value of her agricultural productions.”

PUBLIC WORKS.—The Ohio Canal was undertaken in 1825, completed 1832, connecting Lake Erie at Cleveland with the Ohio at Portsmouth—334 miles; cost \$4,694,934 19. The Miami Canal, from Cincinnati to Dayton, 87 miles, cost \$1,387,552 16. Hocking Canal, through the salt and coal regions, cost \$1,000,000. Walhonding Canal, 25 miles, cost \$610,000. All of these communicate with each other. The Muskingum improvement of the river of that name by dams and locks from Dresden to the Ohio at Marietta. The Wabash and Erie Canal, first commenced in Indiana and continued from the Ohio line to the Maumee Bay, 87 miles, cost about \$3,000,000. The Miami extension is connected with this, cost \$3 500,000. All of these works are of a state character. The state also holds stock in the Pennsylvania and Ohio Canal, and in the Milan Canal Company, the White Water and Mad River Canals, besides several railroads and turnpikes. The whole will appear in the following table:

	Length	Cost,	Revenue	Expen-
		\$	in 1844	diture,
		\$	\$	\$
Ohio Canal,	334	4,693,303 00	252,199	129,184
Miami Canal,	85	1,237,532 16	74,320	36,641
" Extension,	189	9,856,635 96	82,007	188,797
Wabash and Erie				
Canal,	91	3,028,340 06	73,907	51,660
Walbonding,	25	607,968 99	28,461	19,655
Rocking Canal,	56	975,199 57	4,520	6,953
Muskingum Imp.,	91	1,867,318 29	1,184	2,748
Western and				
Maumee,	81	256,334 93	6,613	2,664
Total,	892	15,983,783 64	473,211	441,131

Cincinnati, the metropolis of Ohio, is, and has been for some time, the great city of the northwest. Although an object of history for a much earlier period, the city contained in 1795 but 500 inhabitants; in 1805, 960; in 1810, 2,500. It was chartered as a city in 1815; in 1846 estimated as high as 80,000 in population, and by its rapid increase bewildering our conceptions of the future.

The number of hogs slaughtered in Cincinnati has increased from 85,000 in 1832, to 340,000 in 1843, and over 800,000 in 1846; number bbls. flour made in 1846, 100,000; gallons linseed oil, 26,000, casks of which sent to New-Orleans and Liverpool. The engine shops are extensive, and the number of steamboats fitted out very great, upwards of fifty annually. Besides this, there are white lead and cotton manufactories, &c. &c. The city has yet attained but a tithe of her importance.

"The rapid growth of the state," says Mr. Brough, "and her increase in wealth and prosperity, are the best evidences of her advantages, the surest indications of her future greatness. Located in the very heart of the Union, with a soil unsurpassed in fertility by that of any other state, with living streams flowing through, and abundantly watering every section; rich in mineral deposits; possessed of every facility for manufacturing; her whole southern and southwestern border washed by the navigable waters of the Ohio; and the interior traversed in every direction by turnpikes, canals and railroads, enhancing the value of property, and affording outlets to the markets of the world; and withal, an enterprising, industrious, and intelligent population, the future is to Ohio as full of promise as the past is of high and ennobling pride to her own citizens,—of wonder and admiration to the world. In view of all the advantages she possesses, of what has been done in the last twenty years, and of what the next twenty is certain to accomplish, who can set bounds to the future wealth, power and greatness of this YOUNG GIANT OF THE WEST?" (See Cincinnati, etc.)

OHIO—HER WEALTH AND RESOURCES—1850.—The appendix to the report of the Auditor of State furnishes the following official information:

Acres of land,.....	23,768,885
Value of lands,.....	\$264,661,967
Value of towns,.....	71,177,364
Value of personal property, mon-	
neys and credits.....	92,235,470
Total value of taxable property,	430,839,885
State tax on property,.....	1,266,547
County, school, and township tax,	1,462,721
Road tax,.....	232,162
School-house and other special	
taxes,.....	495,486
Total taxes on grand list of 1849,	\$3,631,878
Number of horses,.....	569,830
Value,.....	\$18,162,269
Number of mules,.....	2,945
Value,.....	\$101,233
Number of cattle,.....	1,058,988
Value,.....	\$10,483,526
Number of sheep,.....	2,911,886
Value,.....	\$2,072,287
Number of hogs,.....	1,947,672
Value,.....	\$2,449,820
Total value of domestic animals,	\$33,269,135
Number of pleasure carriages,...	56,805
Value,.....	\$2,523,400
Number of watches,.....	62,516
Value,.....	\$854,428
Number of pianos,.....	2,117
Value,.....	\$275,203
Value of unenumerated articles,	4,412,163
Merchants' stock,.....	15,406,347
Moneys and credits,.....	81,149,145
Total amount personal property,	92,235,476

RAILROAD STOCK HELD BY THE STATE.

Mad river and Lake Erie,.....	\$398,050
Mansfield and Sandusky,.....	23,333
Little Miami,.....	121,900
Stock dividends on above,.....	71,300

Total amount held by state,.....\$520,133

CANAL STOCKS HELD BY THE STATE.

Cincinnati and White Water,.....	\$150,000
Pennsylvania and Ohio,.....	420,000
Total,.....	\$570,000

The total amount of turnpike, railroad, and canal stocks, held by the state, is \$2,011,358. Dividends on turnpike, railroad, and canal stocks, last year, \$38,049.

The total amount of capital bank stock paid in, in all the banks, is \$6,488,617, and the amount of tax paid by them to the state, the past year, was \$52,862,05.

OHIO.—COAL TRADE.—It is almost impossible to estimate the amount of coal in the state of Ohio, for, rich as she is in her arable lands and in their vast product of grain, she is not more so in that than in her mineral resources. As population becomes more dense and the arts and manufactures increase, coal

will constitute one of the most valuable sources of her wealth. The county of Tuscarawas, for instance, has 550 square miles, and it is stated that coal can be found on every mile of it. (In Professor Mather's Report on Geology it is estimated that Tuscarawas county has imbedded in it more than eighty thousand millions of bushels of coal. The Cincinnati *Atlas* says that in 1834 the coal trade had scarcely commenced in the county of Meigs, and this last year (1848) there was at least 2,500,000 bushels got out in that county. So also, at Nelsonville, in Athens county, no coal was exported before the Hocking canal was made; but in the current year (1848) the coal got out there reached near a million of bushels, which goes into the consumption of towns which before that time consumed no coal.

The following tabular view of the increased product of coal, compiled from statistical documents, is nearly correct, for the years 1840, 1843, 1847, and 1848:

Counties.	1840. Bushels.	1843. Bushels.	1847. Bushels.	1848. Bushels.
Athens.....	84,200	100,000	657,663	715,104
Belmont.....	189,900	200,000	200,000	225,000
Columbiana....	163,000	200,000	200,000	200,000
Gallia.....	15,400	30,000	40,000	45,000
Guernsey.....	55,858	60,000	60,000	60,000
Harrison.....	189,500	200,000	200,000	200,000
Holmes.....	5,000	5,000	10,000	10,000
Jackson.....	55,500	60,000	70,000	75,000
Meigs.....	843,400	1,200,000	2,000,000	2,500,000
Monroe.....	5,450	6,000	10,000	15,000
Morgan.....	77,400	80,000	80,000	80,000
Perry.....	34,190	35,000	40,000	40,000
Scioto.....	41,100	46,000	45,000	45,000
Stark.....	33,800	35,000	40,000	45,457
Summit.....	254,040	361,895	1,237,170	1,397,377
Tuscarawas....	292,230	350,000	275,000	285,000
Wayne.....	10,000	10,000	10,000	10,000
Washington... 34,900		35,000	40,000	40,000
Total.....	2,382,368	2,907,905	5,064,833	6,538,968

In those counties where there are no public works, and no iron manufactures, the product of coal is estimated to remain nearly the same, because the consumption is local and domestic; but in those counties where the public works run, the increase is great, and we know what it is very nearly. So of the county of Meigs (on the river) we know very nearly its increase. The above table is nearly correct, but it is unquestionably something under the mark. To Summit county, we have credited the entire amount of coal cleared from the port of Akron; but it is probable that some portion of it came there by the Ohio and Pennsylvania canal, from places in the line of the canal. The general result is, however, nearly the truth.

The comparison of aggregates shows that—

From 1840 to 1843, the increase was 24 per cent. From 1843 to 1847, the increase was 65 per cent. From 1847 to 1848, the increase was 28 per cent.

In the first three years, the annual increase was 8 per cent., in the next four years 16 per

cent., and in the last year 28 per cent. By the year 1860—eleven years—the coal production of Ohio will probably exceed twenty millions of bushels per annum, or three times the present amount.

The consumption of coal as an article of domestic fuel has very rapidly increased in the interior towns, as the following table of the receipts for consumption, at different points, will show:

	1843. Bushels.	1847. Bushels.	1848. Bushels.
Received at Cleveland....	387,534	1,212,887	1,959,210
“ Newark.....	10,000	56,900	50,280
“ Columbus....	64,186	153,362	293,606
“ Circleville....	92,532	38,800	63,900
“ Chillicothe....	27,470	131,151	223,153
“ Middletown....	8,334	31,784	48,815
“ Dayton.....	97,800	64,495	80,273
“ Piqua.....	1,420	8,075	6,068
Aggregate.....	549,575	1,998,704	2,743,615

This is the consumption only of interior towns—excluding that of Cincinnati. Columbus, for example, has in five years increased the use of coal more than four fold. Chillicothe has in the same time increased eight fold. The coal used at Chillicothe is the Nelsonville coal, Athens county, and is of a very good quality, at a very low price. (See Railroads.)

OLIVES.—CULTIVATION OF THE OLIVE IN THE SOUTHERN STATES.—The Hon. Mitchell King delivered lately before the agriculturists of South Carolina a learned and elaborate address on this interesting subject, with which he has politely favored us. Mr. King occupies place among the first citizens of that commonwealth, as a jurist and scholar, and presided for some time over one of its first literary institutions, from considerations of high public spirit and feelings the most honorable to our nature. We are glad to see such men enlisted in behalf of agriculture and its elevated prosecution among us. Mr. King remarks:

“From the first settlement of Carolina, it has been considered well adapted to the culture of the olive. In one of the earliest accounts of the country, by Richard Blome, published in 1678, it is said that the olive trees brought from Portugal and the Bermudas increase exceedingly, and will produce a quantity of oil. And Samuel Wilson, who had been for years agent of the Lords Proprietors, repeats nearly the language of Blome, and adds, ‘The inhabitants take great care to propagate, more so, that in all probability, it will be an excellent oily country.’ When the charter of Carolina of 1663 was granted, the other proprietors left the chief management of the colony to the very able and unscrupulous Lord Shaftsbury. It is well known that at his request, Mr. Locke drew up his celebrated Fundamental Constitution of Carolina; but it is not generally known, that for a number of years

he carried on an active correspondence with the colony, in which he took the deepest interest, and it is highly probable that in 1879 he procured Mr. Locke to write his judicious observations on wine, olives, fruits and silk, with a special view to South Carolina. The troubles in which Shaftsbury was soon after involved, and his death, in January, 1883, no doubt prevented these observations from being published until a long time after. In the description of Carolina, of 1684, by T. A. Gentleman, we are told 'the olive trees thrive there very well.' Mr. James Colleton, brother to Sir Peter, one of the honorable proprietors, brought an olive stick from Fayal, cut off at both ends, to Carolina, which, put into the ground, grew and prospered exceedingly. 'If the olive be well improved, there may be expected from thence, perhaps, as good oil as any the world yields.' Gov. Glenn tells us, that in the intense frost of the 7th of January, 1747, probably the severest ever felt in Carolina, he lost 'an olive tree of such prodigious size that he thought it proof against all weathers. It was near a foot and a half diameter in the trunk, and bore many bushels of excellent olives every year.' We may conclude, that this was probably one of the first olives planted in the country, and could scarcely have been less than sixty or seventy years old. Even this terrible winter would seem not to have killed all our olive trees, for Dr. Milligan, in Charleston, in 1768, says, 'We have plenty of olives.'*

Mr. King then refers to an admirable letter which he had received from J. Hamilton Couper, Esq., of Darien, Geo., from which we extract the following:

"The first and all-important question which presents itself is, whether our climate is adapted to the olive tree; and to what portion of our territory we may hope to extend its cultivation. The facts which will be presented are, I think, decisive, that the immediate sea-board of South Carolina and Georgia, the whole of Florida and the borders of the Gulf of Mexico are as suitable for the cultivation of the olive as the south of France.

"First as to climate,—Arthur Young, in his travels through France, vol. I., p. 811, observes, 'Several other plants beside the olive mark this climate, the olive climate. Thus, at Mentelmar, in Dauphiné, besides that tree you meet with, for the first time, the pomegranate, the arbor judas, the paliurus, figs, and the evergreen oak.'

"The orange tree is found to be more tender than the olive, in France and Italy. The same writer says, 'The latter, the orange, is so tender that this, Hieres, is supposed to be the only part of France in which it will thrive in the open air. I went to Hieres to view them, and it was with pain I found them, without exception, so damaged by the frost in the winter of 1788, as to be cut down, some to the ground, and others to the main stem.'"

Simonde mentions in his work on "Tuscan Agriculture" that the olive is considered in Italy as hardier than the vine. He further observes that he himself had olives and vines planted together, and the latter suffered most from the cold. Mr. Jefferson, in his letter of July, 1787, to the Agricultural Society of South Carolina, remarks, "Wherever the orange will stand at all, experience shows that the olive will stand well, being a hardier tree."

"These extracts, which are from writers of the highest authority, are interesting, as they show from the growth of the fig, the pomegranate, and the orange, that the climate of the olive region of France is no milder than the maritime districts of South Carolina and Georgia, and the whole of Florida. But the actual growth of the olive tree itself, proves this most conclusively, as far as the limited period which has elapsed since the introduction of that plant into this country admits of a comparison.

"I believe that you had some olive trees growing in Charleston for half a century, before the fatal spring of 1835. Ramsey mentions the fruit being pickled from trees imported by Henry Laurens.

"At Dungeness, on Cumberland Island, Georgia, a number of trees bore abundantly for many years before that season.

"In 1825, my father imported, through a French house in Charleston, two hundred trees from Provence, via the Languedoc canal and Bordeaux. They were five months on the way, and did not arrive until May, notwithstanding which a very few only failed to grow. These trees were planted at Cannon's Point, his residence on St. Simon's Island, latitude 81° 20'; and had borne several small crops of olives, when the severe cold of February, 1835, (8° of Fahrenheit,) injured them so much that it was necessary to cut them down to the ground. They all threw up shoots from the old stumps; and many of them have now attained to a diameter of nine inches. For the last two years they have produced some fruit; and this year about one half of the trees are bending under the weight of an abundant crop. About one hundred trees raised from cuttings are also beginning to bear. It is now twenty-one years since the importation of these trees, and with the exception of the destructive season of 1835, they have never in the slightest degree been injured by the cold. The last winter was one of unusual severity, the ther-

* In a letter to Chancellor Johnston, Mr. King quotes from a paper by the Governor of South Carolina, in 1747, who says, "The frost has destroyed almost all the orange trees in the country. I lost about three hundred bearing trees, and an olive tree of such prodigious size that I thought it proof against all weather. It was near a foot and a half in diameter, in the trunk, and bore many bushels of excellent olives every year."

mometer having sunk to 19° Fahrenheit; and although the sweet oranges on the same plantation were much injured, some having been cut down to the ground, I could not perceive that a single leaf, among two hundred and fifty olive trees, had been touched by the frost. This experience is certainly very satisfactory, the more particularly as it is certain that the season of 1835 was the coldest known on this coast, for at least one hundred years; as is proved by the destruction of orange trees on St. Simon's island, which had stood since the occupation of that island by Gen. Oglethorpe, and of others at St. Augustine, which dated still farther back.

"The effect of one such disastrous year should not discourage the introduction of so valuable a tree. In the south of France they have persevered in its cultivation, although in 1709 and 1788 almost every tree was destroyed to the ground; and they were severely injured in 1740, 1745, 1748, 1755, and 1768.

"The question may be asked by those who have usually regarded olive oil as merely an article of household economy, of very limited use in North America, whether a ready sale of the oil can be depended on? They may believe with the late Abbé Correa, that our countrymen have 'bacon stomachs,' and that it will be very difficult so far to conquer the obstinacy of established habit, as to induce them to substitute pure oil for rancid bacon. If the only use of this oil were for food, it would undoubtedly require time to introduce it into general consumption, but that time will effect it there can be no doubt, from the intrinsic value of the article. Until then an ample demand for all that can be produced will be found in the annually increasing consumption of this oil in machinery, and in various manufactures, particularly of wool and soap. Already we import 82,655 gallons, (see Report of the Secretary of the Treasury, for 1845), and as our manufactures are comparatively as yet but in their infancy, and our population increasing with undiminished rapidity, there is no danger of the production overtaking the demand. What the demand may become is shown by the fact, that England imported in the year 1830, 2,971,057 gallons of olive oil, valued then at \$2,500,000—an average of 88 cents per gallon.—McCulloch's Commercial Dictionary, article 'Olive Oil.' And that France, although the production of that kingdom was, as early as 1788, estimated at 75,000,000 of francs, or nearly \$15,000,000, has yet imported in one year olive oil to the value of near 30,000,000 francs, or \$6,000,000.

"Some idea may be formed of the value of the olive tree as a source of national wealth, from the above statement of its production in France, a country on the northern verge of the olive climate. In countries more favorably situated, it is still more important. The

small kingdom of Naples exports annually about 7,800,000 gallons of olive oil, valued there at \$3,400,000.

But as olive oil enters largely into domestic consumption, particularly among the lower classes, forming a wholesome and nutritious article of food, it has an importance far exceeding its merely commercial value. The ample home production of the necessities of life, is the true foundation of national independence and happiness; and whatever adds to the unstinted enjoyment of physical comfort, it becomes the well-wisher of his country to value. It may safely be asserted, that the United States owe their great happiness and prosperity more to the cheap abundance of Indian corn, and the consequent full supply of animal food, than to all of the staples which figure so largely on the list of foreign exports.

"Mr. Jefferson, with equal beauty and patriotism, observes, 'If the memory of those persons is held in great respect in South Carolina, who introduced there the culture of rice, a plant which sows life and death with equal hand, what obligations would be due to him who should introduce the olive tree, and set the example of its culture! Were the owner of slaves to view it only as a means of bettering their condition, how much would he better that by planting one of these trees for every slave he possessed! Having been myself an eye-witness to the blessings which this tree sheds on the poor, I never had my wishes so kindled for the introduction of any article of new culture into our own country.'

POST-OFFICE.—HISTORY OF THE POST SYSTEM.—THE UNITED STATES POST-OFFICE; ITS HISTORY.—THE POST-MASTER-GENERAL—BUREAUX OF THE GENERAL POST OFFICE—POSTMASTERS; THEIR DUTIES, &c.—TRANSPORTATION OF THE MAIL—DISTRIBUTION—RATES OF INTERNAL POSTAGE—RATES OF FOREIGN POSTAGE—MAILING OF NEWSPAPERS, COLLECTION OF POSTAGE, AND DELIVERY OF LETTERS—LETTER-CARRIERS AND MAIL AGENTS; POSTAGE STAMPS AND ADVERTISING—THE FRANKING PRIVILEGE AND LOST LETTERS—EXPENSES AND RECEIPTS OF THE DEPARTMENT, &c., &c., 1851.—The system of posts, as at present in operation, is an invention of modern times. It has contributed much more than is generally supposed to the elevation and improvement of mankind. In addition to the material, and by consequence more tangible benefits, which it has, in common with the steam-engine and other similar inventions, conferred upon the more civilized portion of the human race, it has contributed not a little to its political and social advancement, and is destined, in the future, to work out in this field yet more important and more striking results. How much our own country is indebted for its prosperity—a prosperity in some respects

unequalled, perhaps, in the world's history—to its extensive and well-ordered post-office system, will appear at a glance to any one who has reflected upon the intimate connection which subsists between the various parts of the wide-extended, yet, through the medium of this very agency, admirably consolidated confederacy. Nor are we alone the recipients of its blessings. Its advantages are enjoyed also by all the Christian nations of Europe, and, in particular, by those which are most celebrated for their continual advances in commerce, science, and the arts. All these, and ourselves among them, have reaped, not only as integral states, but as individual nations forming component parts of one great community, numerous and signal advantages from the establishment of posts within their boundaries—benefits which we can hardly estimate at this day, and for which, apart from the post system, we might, indeed, as did the ancients, have sighed, but would, as they, have sighed in vain.

HISTORY OF THE POST SYSTEM.—The word *post* is derived from the Latin *ponere*, to place; the post being so called, probably, because horses were placed (i. e. posted) at fixed distances, for the transport of dispatches. Posts were first used, as far as we know historically, by Darius I., of Persia, (500 B. C.) who employed them solely for the use of the government. The dispatches were transmitted with extraordinary speed along the high road which connected the western part of his empire with the seat of government, by couriers trained to the business, and furnished with frequent relays of horses.

The most complete system of posts known in the ancient world, was established by Augustus in the Roman Empire. The head of the department was the commander of the Prætorian guards. These posts were employed only by the government, chiefly for the purpose of obtaining intelligence from the army. By their means messages were sent with surprising swiftness: for Augustus, on several occasions, received dispatches in four days from Scævonia; and at a later period, Tiberius was wont to reject as valueless dispatches which had consumed more than twenty days in coming from Asia, fifteen from Europe, ten from Africa, five from Scævonia, and three from any part of Italy.

The first regular establishment of posts in modern Europe was the work of Louis XI., of France, (July 19th, 1464,) who founded post stations, four miles apart, on the chief roads of his kingdom, for the use of the government and court. Subsequently, under Charles VIII., (1560,) private individuals were permitted to make use of the institution for forwarding letters and dispatches;

the money charged for transmitting which, formed thereafter a source of revenue for the government. Under Louis XIII., (1630,) the system received a form more regular and complete; and a comptroller-general of posts was appointed. Previously to the time of Louis XI., dispatches were sent by special messengers, sometimes mounted and sometimes on foot; the nearest approach to a regular post system being that made by the university of Paris, which maintained, as early as the 13th century, pedestrian messengers, who, at stated times, took charge of letters and money for the young men who had come from every part of Europe to pursue their studies in the university. For more than one hundred years, the French post was farmed out by the government; first by the minister Louvois, under Louis XIV., (1676,) and, for the last and twenty-third time, under Louis XVI., (1786.) At the expiration of this last lease, (1791,) the establishment was taken under royal management; from which time it has been conducted with less expense and with more benefit to the people. When the post was farmed out for the third time, (1688,) the revenue which it yielded amounted to 1,400,000 francs; in 1788, to 3,000,000; and, in 1791, to 11,000,000 francs. From 1814 to 1822, the average annual yield of the letter posts was 21,890,000 francs. At the head of the entire post-office establishment is placed a general director; in each department is a post-inspector, and in each post-office a director, a comptroller, and an adequate number of assistants. Until the revolution of 1789, the postmasters possessed civil immunities of various kinds, in consideration of which they transported the mail for a small compensation; but these privileges were taken away when the republic was proclaimed, and a salary granted instead by the National Assembly. In 1828, the postmasters received for carrying the mail, and for dispatching public expresses, thirty sous (or cents) per stage for each horse, and twenty-five sous for each courier, by one or more of whom every mail must be accompanied. Their contracts for transporting the mail are made with the director-general of the posts. Postmasters take an oath to preserve the inviolability of letters passing through their hands; but, until of late years, (since 1828,) the government has claimed, and sometimes exercised, the right of examining their contents. In 1847 there were in France 3,582 post-offices; the circulation in the mails for that year amounting to one hundred and fifteen millions of letters, against sixty millions in the mails of the United States. The rates of letter postage have been, for some time, two sous for the first twenty-five English miles, and a corresponding advance for each prescribed distance. The late change in the regulations has fixed a uniform rate of

four sous (about four cents) for any distance within the republic.

In Germany, the first post was established by Roger I, count of Thurn, Taxis and Valsassina, in Tyrol, in the latter part of the 15th century. Subsequently other posts were established in the empire, the most important by counts of the same family; and, in 1543, Leonard of Taxis was appointed postmaster-general of the empire, in which office he was afterwards confirmed, and finally, in 1616, his descendant, Lamoral, was invested with the imperial post as an imperial fief, with the right of transmission to his posterity. A regular post went at that time every week from the imperial court, and also from Rome, Venice, etc., to Augsburg, and thence to Brussels and back. This imperial post ceased to exist as such when the empire was diamembered, (1806.) Since that period, post establishments of different kinds have existed in the various states of Germany. At present, Austria, Prussia, Bavaria, Hanover, Saxony Baden, Mecklenburg-Schwerin, Holstein-Oldenburg, Holstein-Lauenburg, and Luxemburg, have each their own independent posts; but the house of Thurn and Taxis still possess, as a fief, confirmed finally by the Congress of Vienna, the posts in Wurtemberg, Hesse-Nassau, the states of the Saxon-Ernestine line, the two Schwarzemburgs, Hohenzollern, Waldeck, Lippe-Detmold, and in the territories of the princes of Reuss. In other states, the Thurn and Taxis post exists, not as a fief, but founded on a regular compact. The whole post establishment of this family is superintended by a postmaster-general at Frankfort-on-the-Main; and it extends over an area of 25,000 miles, containing 3,753,450 inhabitants. It is, in fact, a private monopoly, managed for the benefit of its owner. Lichtenstein has no post.

In Germany, the stage-coaches (called *fahrende posten*) are usually united with the post-offices; by which parcels may be sent as safely as letters: an advantage by no means compensating, however, for the accompanying loss of speed in the transmission of letters and dispatches. Mail contracts are made at fixed prices: an allowance per mile for the ordinary service, and a share of the profit for extra work. The scale of postages in the different German states resembles in general that of Prussia, "which," says Mr. Bowen, "commences with a rate for the first two miles, equal to about 9½ miles English, of one silver groschen, equal to 2½ cents, increasing by a groschen for each interval of from five to ten miles German, with an intervening half rate. A reform in postage has been decreed by a recent postal congress at Dresden, fixing two rates in substitution of the foregoing: one of five kreutzers, (old German convention money,) about equal to five cents, for any distance not exceeding ninety-five miles (Eng-

lish;) and the other, ten kreutzers, or cents, for any distance over.

The post establishments of other European continental countries are modelled after those of France or Germany. In the kingdom of the Netherlands, the system of France, introduced upon the incorporation of that country with the French empire, is still followed with little alteration. To the house of Thurn and Taxis is due the honor of having first introduced the post into the country. In Italy, since 1815, the post system in the Lombardo-Venetian kingdom, Tuscany, Parma, and Modena, conforms to the Austrian model, still preserving, however, the French basis which was given it on the union of those states with the empire of France. Throughout all Italy the post-office is well managed, as indeed it has been ever since its original establishment in that country by the German emperor, from whom, it would seem, the postmasters received, at first, their remuneration. In Switzerland, each canton regulates its own post; but, by common agreement, something like uniformity has been reached in its general management. In Spain and Portugal the post-office is preided over by a *correo mayor*, as director-general, but its operation is quite imperfect. In Turkey there is no post; but the Grand Seigneur maintains mounted Tartars, whose business it is to forward as rapidly as possible his own and the dispatches of the public authorities. In Russia, whose post system is founded on that of north Germany, letters are forwarded with celerity and safety, at rates which are exceedingly moderate. A letter of an ounce weight is charged two kopeks (two-fifths of a cent) for every one hundred versts (66 miles) up to 1,500 versts; an additional kopek for any distance between 1,500 and 3,000 versts; and not over fifty kopeks (ten cents) for any distance over 3,000 versts. Extra posts are cheap and expeditious, a post-horse costing not more than two kopeks the verst; and a journey of 4,580 versts, which consumes eight weeks in making it, costing only about \$220, the expenses of living included. The postal revenue of Russia is estimated at about \$800,000 per annum.

In England, the post-office was not established till the year 1649. It was then founded by Mr. Edward Prideaux, attorney-general for the Commonwealth, who arranged for the weekly conveyance of letters to and from all parts of the kingdom. Postmasters were, it is true, in the employ of the government before this period; and Charles I. had erected (1635) a letter office for England and Scotland, extending, however, to only a few of the principal roads, the postmasters on which transported letters at the rate of 2½d. per mile for each horse. This establishment did not succeed, but entailed an expense on the government, which, just before Mr. Prideaux's plan was put into operation, amounted to

\$7,000 a year. Under the new order of things, the post-office yielded the attorney-general such handsome profits, that it could not be leased for £10,000. In 1657 the post-office was established nearly on its present footing, and rates of postage were fixed which continued to the time of Queen Anne, when (Act 9, Anne) modifications were introduced, which have remained in force, in substance, up to the reign of the present sovereign, under whom (2 and 8 Vict. chap. 52) occurred the reduction of postage to the simple and cheap rates which now prevail. Previous to this reduction, the average rate of postage amounted to 7d. or 7½d. per letter, the charge on each varying with the distance. These prices yielded the government a net revenue, in 1838, of £1,676,522, or about \$8,000,000. The new rates commenced in 1840, according to which all inland letters, without regard to distance, provided that they be paid on being posted or sent off, are, if they weigh no more than ½ an ounce, charged 1d.; 1 oz. 2d.; 2 oz. 4d., and so on, 2d. being added for every additional ounce up to 16 oz., beyond which weight no packets, with certain exceptions, whether subject to postage or not, can be received. Letters not pre-paid are charged *double* these rates. The franking privilege is abolished; but addresses to the Queen are not chargeable with postage, nor petitions for either House addressed to parliamentary members, provided they are sent open at the sides, and do not weigh more than 32 ounces. Newspapers published in the kingdom are not charged for transportation, as the government has already received its pay in the shape of a stamp duty of one penny on each paper; foreign newspapers are charged at rates varying from 1d. to 4d. In France, newspapers are charged 4 centimes (four fifths of a cent) postage on a small sheet, which must be pre-paid. In Germany, the rate is one quarter that of letters, according to weight. For the year ending January 5, 1839, the gross revenue of the British post-office was £2,890,763; the expenditure, £756,999; leaving a net revenue of £1,633,764. In 1850, ten years after the reduction of the penny rate, the gross revenue was £2,165,349; the expenditure, £1,324,562; leaving a net revenue of £840,787. During 1847 the postage paid by, the government amounted to £168,855.

All the business of the English post-office is done in the name of the postmaster-general, who is also a member of the cabinet, and has a seat in the House of Peers. His salary is £2,500 a year. His chief assistant is a secretary, with a salary of £2,000. There are several other officers who rank above the ordinary postmasters; the most important of whom is the solicitor of the department, whose pay is to be £1,500 per annum. The highest salary received by a postmaster in England is £1,000, (\$4,840,) which is given in Liverpool;

the lowest is £30, (\$145.20,) a year. The pay of the clerks ranges from £80 to £500 per annum.

Every provision is made in England for the safe and speedy transmission of the mails. The railway companies are bound to take them at such hours and such speed as the postmaster-general may require. The prices paid to the railway companies for this service vary from 1d. to 2s. 9d. the mile; one penny the mile, according to the mode of reckoning adopted, being equal to \$14.72 a mile per annum, daily service; and 2s. 9d., being equal to \$451.93 a mile, daily service. The latter enormous price is paid in cases where the mail forms almost the only article of transport, on account of the time at which the train is made to perform its journey. The expenses of the mails conveyed on coaches are included in two items: the first, the price of building and keeping coaches in repair, which, at the maximum, is \$17.84 per mile, a year, daily service, at the minimum, \$9.89 per mile; the second, the price for horsing and conveying the mails, which varies from 0d. to 6d. per single mile. Any driver, horse, or coach, can be dismissed from the service by the postmaster-general. The annual cost of mail transport in England averages thirteen cents a mile, daily service.

Special provision is made for the payment of small sums of money, not exceeding £5, through the agency of the post-office. The money being deposited at one office, an order for the amount, deducting the discount, will be given on any other office in the kingdom. The charge is 3d. for orders of £3 and less; 6d. for sums over that amount within the specified limits. In 1847, the transactions of this character amounted to £14,115,153; and at present 800 clerks are employed in attending to the business in the principal office in London; a branch of which exists in every important post-office in Great Britain. On the continent of Europe, money is insured in transitu in the mails, at rates stipulated by each government.

The transport of letters from one part of the city to another, forms in London, as in Paris, no inconsiderable business. In the former city, there are employed 1,367 letter-carriers, who receive pay varying from 15s. to 80s. a week. In 1847, more than thirty-three millions of letters, it is estimated, exclusive of those of the general post, were delivered in London, on each of which the same postage was paid as is charged on a letter traversing the kingdom from one end to the other. These city letters are delivered ten times a day; in Paris seven times a day.

The dead-letter office of England is an object of no little interest. In 1850, about two millions of letters were returned as dead, no owners having been discovered: in these there was found, when opened, property to

the amount of nearly \$2,500,000. some of them having actually been posted without any direction. A single letter, on being opened in this way, not long since, was found to contain bank notes to the value of \$7,500. The dead letters, after examination, are sold, Mr. Bowen thinks, for waste paper; instead of being burned, as is done in the office at Washington.*

Certain features common to the post system of Great Britain and the continent, but not to this country, deserve here a brief enumeration. They are: (a) the appointment of a fiscal officer, not subordinate to the head of the department, to keep a check on his accounts; (b) the accompaniment of the mails by armed guards; (c) the registration of letters for their safe transmission, on the payment of a fixed fee; (d) the delivery of letters by the carriers, and a prompt return, if letters are not inquired for, to the dead-letter office, unless marked "*posta restante*," or to that effect; (e) the limitation of letters by weight, in France and Germany, not exceeding $\frac{1}{2}$ an oz; (f) the conveyance of money by mail, under special regulations; and other peculiarities not important to mention.

In America, the history of the post-office dates as far back as 1677, at which time an office was established in Boston, under John Howard, by the colonial court. In 1683, another was created in Philadelphia, by the order of William Penn. A scheme for establishing a post-office for the whole country was carried, in 1700, into successful operation, by Col. John Hamilton, of New-Jersey; but this was superseded, in 1710, by the act of parliament "for establishing a general post-office for all her Majesty's dominions." Chief letter-offices were to be kept in New-York, and other convenient places in each colony. The name of Franklin is intimately associated with

the early history of the American post-office. He was chosen postmaster in 1737, and, in 1753, was appointed one of the two deputy postmasters-general of North America. At the latter date, the length of the post-roads in the thirteen colonies was 1,532 miles, North Carolina having the most, and New-Hampshire the least. In 1774, Franklin was dismissed from his office, only to be elected next year postmaster-general by the Continental Congress. In 1790, after the post-office had fallen, by the express terms of the constitution, under the exclusive control of the general government, there existed in the Union only 75 post-offices, and only 1,875 miles length of post routes. To perform "a complete tour" between Philadelphia to Pittsburg occupied twenty days; and the annual cost of the whole service was \$22,702. There are now in the United States nearly 30,000 post-offices, 196,200 miles of post roads, and 53,272,253 miles of annual inland mail transportation. Great Britain had, in 1847, 4,785 post-offices; France, 8,582. The number of letters circulated in our mail during the year was 60 millions; while France had 115, and Great Britain the still higher number of 300 millions.

THE UNITED STATES POST-OFFICE.—At the head of the post-office department stands the Postmaster-General, who is at present N. K. Hall, of New-York. He has three principal assistants, each of whom presides over a particular division, or bureau, of the general post-office. These divisions are the contract office, the appointment office, and the finance and dead-letter office; to which are to be added the inspection office, presided over by the chief clerk of the post-office department, and the auditor's office, presided over by the auditor. Under each of these presiding officers are a number of clerks, amounting in all to about one hundred and fifty.

The general post-office building, one of the most beautiful edifices in Washington, occupies a whole square, reaches three stories in height, and contains about one hundred apartments. Completed under Amos Kendall, it was first occupied in 1836. The ground-floor of the building is occupied mainly by the auditor's clerks, the topographers, and the dead-letter office; the second floor by the officers and clerks of the post-office proper. The apartments of the Postmaster-General, who is also a cabinet minister, are situated in the main building, and are elegantly furnished. Here he receives visits of business and of ceremony. The rooms of his assistants, and those of the chief clerk and of the auditor, are contiguous to those of the Postmaster-General. The wings of the second story are occupied by the clerks of the contract, inspection, and appointment offices, among whom are found a few belonging to the auditor's office. The third story is appropriated to clerks of the last-mentioned office, to whom

* Some very curious articles are discovered inclosed within the letters opened at this dead-letter office. Mr. Bowen, United States Post-Office Guide, relates the following: "Packages, not exceeding in weight sixteen ounces, are permitted to be sent by the British mail; and many curious packages in consequence pass through the London post-office. Game of various kinds, plum-pudding, bits of wedding cake, lobsters, and, strangest of all, live mice and pet canary birds, have thus been forwarded, and safely delivered. In one case, a lot of leeches were sent in bladders, several of which burst, and the water having wet the letters, many of the poor creatures were found crawling over the correspondence of the nation. In another instance, a jar of strawberries was dispatched through the mail, but being smashed in the bag, completely destroyed a packet full of valuable lace belonging to the late Queen Adelaide. A mercantile agent going his round through the country, soliciting orders, found he had forgot his pistol. He wrote to his wife for it, and she sent it by return of mail, labelled and loaded to the mouth with powder, ball and slug. A roast duck, a box of spiders, and a live snake, were also among the things forwarded in this way. Most curious of all, however, was a bank-note for £50, without an envelope, the two ends being merely wafered together, and the address written on the back."

are added a few of the contract office; and contains, besides, the book-keeper's office, with its twenty-five, or more, clerks.

The Postmaster-General.—The Postmaster-General is appointed by the President, and has the general superintendence and management of the entire post-office department of the United States. Through him the establishment is controlled and regulated by Congress; and by him all postmasters are appointed whose income is not above \$1,000 per annum. So varied and numerous are the duties of this officer, that only a small portion of them can be, and are in fact, performed by him in person: by far the greater part of them are, of course, attended to by his assistants and their clerks; among whom, especially since 1836, the strictest order and discipline prevail. All business is prepared by the clerks, and is then submitted by them to the Postmaster-General himself, or one of his assistant, who thereupon enters his order; after which the papers which have been prepared in accordance with such order, receive his signature. It is the duty of this officer to submit yearly to Congress an estimate of the amount of money which will be required for the department during the ensuing fiscal year, (commencing with July,) and also to present an account of the expenditures which have actually been made for the department from the time of the last annual estimate. His most important and difficult duty is the regulation and supervision of the expenses of the department, and the general management of its monetary affairs. It is his business, too, to pay over, or to have paid, all the revenue of the department into the treasury of the United States, on the books of which it is entered to the credit of the post-office, as an offset to the debit created by the annual appropriation. Besides performing these duties, the Postmaster-General must decide upon the official forms of all the papers to be prepared by his more than 30,000 subordinates; must direct in what manner accounts are to be kept and rendered; and, in short, must exercise a general supervision over all the business, often complicated and involved, of the entire post-office department.

Bureaux of the General Post-Office.—The bureaux or offices into which the general post-office is divided for the sake of facilitating its business have already been mentioned. Of these, the first named, or contract office, has assigned to it, as its proper duty, the arrangement of the mail service, the making of mail contracts, the location of distributing offices, the supervision of the post roads, &c. The appointment office has exclusive direction of matters relating to the establishment and discontinuance of post-offices, changes of sites and names, appointments and removals of postmasters, and the giving of instructions to these last named functionaries. The miscel-

laneous affairs of the department, also, are properly under the management of this bureau. The finance office has the supervision and management of all the financial business which is not attended to by the auditor. Its head, the third assistant postmaster-general, has charge also of the dead-letter office, of the issuing of stamps for the prepayment of postages, and of the accounts connected with their issue. The inspection office examines the registers rendered by postmasters of the time of the arrival and departure of the mails; inquires into all delinquencies of mail contractors, postmasters, &c., and all depredations committed upon the mail. The auditor's office was established in 1836. The duties of the superintending officer are multifarious. He is "a comptroller, a commissioner of revenue, an auditor-general, a registrar, and a solicitor; nay, every thing in relation to the fiscal affairs of the department, except what appertains to the Postmaster-General, and his assistants, and the treasurer. In short, his office is an 'imperium in imperio,' and though comparatively simple in its organization, is multitudinous in its details." Besides the auditor, there is connected with the general post-office a treasurer, an officer created in 1836, who receives and has charge of all moneys collected by the Postmaster-General. The dead-letter office, a branch of the inspection office, though not under the control of its head, occupies four rooms, and has thirteen clerks in its service. Every letter which comes to this office is, after a stated interval, opened by its clerks; and those that contain money or valuable property are read, and every effort made to discover the owners. All the other dead letters are cast into a heap, without any examination of their contents, and consumed by fire. Letters containing money are not found so frequently as in the dead-letter office of England. The whole amount received in this way in 1850 was \$2,000. The chief cause of the accumulation of these dead letters is misdirection. The number which is emptied annually into the vaults of the post-office at Washington is immense. It amounts, on an average, to 24,000 bushels, or about 20,000,000 of letters per annum. The postages on most of these are unpaid; it is estimated, however, that the proportion of unpaid will hereafter be much less, under the operation of the new postage law, which went into effect last July.

Postmasters, their Duties, &c.—Every postmaster must be an actual resident of the place in which the office he superintends is established; and he must be a citizen of the United States. He cannot enter upon his duties until he has taken oath and given satisfactory sureties for the proper performance of his official functions. His duties must be attended to by himself personally, or by the aid of a sworn assistant or assistants, if necessary

No other person but himself and his qualified assistants can have access to the letters and papers of the office, or interfere in any way with the mail. The mail may, indeed, be opened within view of other persons, but not within their reach. The postmaster is required to keep his office open daily during the usual business hours of the place; but on Sunday he need keep it open only an hour, but more if it be his pleasure; and, furthermore, he cannot resign his office and leave off the performance of his duties at his option; but must, even after resignation, superintend the office affairs until a properly qualified successor relieves him of his charge. Postmasters are required to make *quarterly returns* of the details of the business of their respective offices, and forward them to the department. These returns are examined by the auditor, and their errors, if containing any, are carefully corrected. A failure to send their returns within the specified time is followed by a fine. Besides making up and forwarding the quarterly returns in question, every postmaster must keep in his office a *general account* for the service of the department, subject to the inspection of the Postmaster-General, or any agent of the department, a copy of which is to be furnished to the auditor whenever he may require one. This general account affords the means of comparison and adjustment, if a difference arises between the accounts of any postmaster and those of the auditor.

The payment of the services of postmasters is fixed by law. On any amount of letter postage (which, in this case, includes all prepaid postage upon transient papers, etc.) received by them, not exceeding \$100 in any one year, they are allowed 40 per cent.; on any sum between \$100 and \$400, 33½ per cent.; any between \$400 and \$2,400, 30 per cent.; any over \$2,400, 12½ per cent. Besides this, they are entitled to 7 per cent. on the amount of letters and packets received for distribution, but this only holds good of offices specified by the Postmaster-General; two cents on every free letter not addressed to postmasters, (unless other commissions amount to \$500 in the same quarter,) and 50 per cent. on all sums arising from postage on newspapers, magazines, etc. Charges for incidental expenses, moreover, are, in certain cases, allowed to be made against the department. For any deficiency arising in any post-office, after these commissions and allowances are made, the postmaster has no claim against the United States. If any balance is left, these deductions being made, it is to be acknowledged by him in his quarterly return. The payment of such balance, when called for, by draft or otherwise, must be made in specie bearing the stamp of the United States; any deficiency in the weight of which, as also any loss of post-office money or prop-

erty by fire, robbery or theft, must be made up by the postmaster. A refusal to pay over balances to any officer of the department, is considered *prima facie* evidence of embezzlement on the part of a postmaster; which crime, if proved, as also any unlawful detaining of a letter or packet in his office, renders him subject to heavy legal penalties. According to the recent report of the Postmaster-General, there were appointed during the fiscal year ending the 30th June, 1861, 5,339 postmasters, of whom 1,698 were appointed on the establishment of new post-offices. The entire number of post-offices now in operation is 19,796; nearly 1,700 having been established, and 256 having been discontinued, during the year. In the same report is expressed the conviction that the commissions allowed to postmasters will be found too moderate for the labor required by the new postage law. Of the post-offices now existing, 668 are in Maine; in New-Hampshire, 856; Vermont, 382; Massachusetts, 585; Rhode-Island, 74; Connecticut, 339; New-York, 2,319; Delaware, 60; New-Jersey, 394; Pennsylvania, 1,790; Maryland and District of Columbia, 337; Virginia, 1,296; North Carolina, 785; South Carolina, 484; Georgia, 658; Florida, 105; Alabama, 580; Mississippi, 553; Louisiana, 218; Arkansas, 328; Texas, 810; Tennessee, 760; Kentucky, 669; Ohio, 1,640; Michigan, 544; Indiana, 896; Illinois, 1,026; Missouri, 592; Wisconsin, 477; Iowa, 294; California, 84; Utah, 1; New-Mexico, 2; Nebraska, 2; Minnesota, 16; Oregon, 31. Of the postmasters superintending these, 36 receive a salary of \$2,000; 174 from \$1,000 to \$2,000; 347 from \$500 to \$1,000; 208 from \$400 to \$500; 381 from \$300 to \$400; 697 from \$200 to \$300; 2,022 from \$100 to \$200; 3,279 from \$50 to \$100; 4,086 from \$25 to \$50; and 8,369 a salary under \$25 per annum.

Transportation of the Mail.—The United States is divided into five contract sections, and the contract year commences on the first of July, and includes four civil or solar years. These contracts for transporting the mail are let, according to the act of 1845, "to the lowest bidder tendering sufficient guarantees for faithful performance, without other reference to the mode of such transportation than may be necessary to provide for the due celerity, certainty, and security of such transportation." Some of the leading, and to the general observer, most interesting features of the mail contract are the following: (a.) Only seven minutes at the most are allowed for opening and closing the mails; (b.) the mail is to be conveyed in preference to passengers, even, if necessary, to their exclusion; (c.) post-office blanks, mail-bags, and special agents are to be conveyed without extra charge; (d.) mail agents are to be conveyed without charge on railroad and steamboat lines, when the size of the mail or other reasons require it; (e.) for-

failures of pay, wholly or partial, according to a fixed scale, are to take place when trips are not performed, and fines are imposed for arrivals behind the time. For every failure to arrive within the contract time a specified excuse must be given, and a register of such failures and the alleged excuses must be kept by the postmaster at whose office they occur. A contractor is bound to supply all offices within eighty rods of his route, even though they be established after the date of his contract, without additional pay; and he is required in all cases to carry the entire mail, any leaving behind of the mail bags subjecting him to a fine, to be deducted, as are all the fines he may incur, from his contract pay. Contractors on special routes, if their route yield the sum specified, receive that sum, if not, they must bear the loss; if it yield more, they only receive the stipulated compensation. Other rules relative to the transport of the mail, not specially relating to contractors, worthy of particular mention, are the following: (a.) The mail cannot be borne upon a road which has not been declared a post road, except in certain well understood cases; (b.) a member of Congress can have no interest in any mail contract; (c.) the mail can be carried only by free white persons, a fine of \$20 being imposed on the contractor for every violation of the regulation; (d.) the master of every ship arriving from any port in the United States at another where there is a post-office, must deliver to the postmaster all letters in his charge, before he is allowed to break bulk or make entry; (e.) no letters or packets can be carried over any post route outside of the mail, excepting private messengers, and by those who receive no compensation; (f.) no postmaster, or his assistant or clerk, can be a contractor, or be interested in a contract for carrying the mails; (g.) the Postmaster-General is empowered to make special arrangements with the owners of steamboats and railroads for transporting the mails, without reference to the ordinary mode of making the mail contracts; and, for extraordinary expenses when required, he may grant the most liberal terms; (h.) a mail carrier losing, destroying, or deserting his mail, is liable to heavy penalties; and any person robbing him is punishable, for the first offense, with five years imprisonment, and for the second with death, which latter penalty is also inflicted for the first offense if the carrier be wounded or killed; (i.) postmasters, drivers of mail-coaches, and mail carriers, are exempt from militia and jury duty.

The subjoined information respecting the extent and expense of the mail contracts for the year ending with the close of June, taken from the report of the Postmaster-General, as it appeared in the *National Intelligencer* of December 3d, 1851, will no doubt be very acceptable in the present connection. Six thousand one hundred and seventy mail routes

were in operation in the United States, forming an aggregate length of 169,290 miles, and involving an annual cost for the transportation of mails of \$3,421,754. The total annual transportation amounts to 53,272,252 miles, of which 8,568,707 are performed upon railroads, at an average cost of about eleven cents five mills per mile; 5,454,982 miles in steamboats, at a cost of about eight cents three mills per mile; 19,726,588 miles in coaches, at about five cents three mills per mile; and 19,521,975 miles in modes not specified, at about four cents eight mills per mile. As compared with the previous year, this statement exhibits an increase of 13,354 miles in the length of inland mail routes, and of \$547,110 in the annual cost of transportation; but the comparison is irrespective of the routes in California and Oregon. In the former state the annual transportation amounts to 537,476 miles, and the annual cost to \$130,270; in the latter to 66,960 miles, at an annual cost of \$40,441. There are six foreign mail routes, three of which are under contract with the post-office department, at a cost of about \$2.09 9-10 per mile; and three under contract with the Navy Department, at a cost of about \$2.42 6-10 per mile.

Distribution.—In order to insure certainty, regularity, and dispatch, in sending packets from one remote point to another, offices have been established, which, besides the usual duties, perform the work of distribution. Much attention has been bestowed upon this subject, from time to time, by the different officials connected with the department. Systematic distribution was first attempted by the elder Granger, (1810;) each postmaster, previous to his time, being left to exercise his own judgment as to the best and most expeditious route for forwarding the matter of his mails. Modifications were subsequently made, at different times, in this scheme, which resulted finally in the arrangement now existing. It is unnecessary to give here the details of the plan of distribution. It is sufficient to say that, with all its modifications, it is yet quite imperfect, and frequently halts in its operation. Notwithstanding all the care taken to prevent mistakes, they are constantly occurring. Three hundred letters, for example, are received daily at the New-York office which are improperly sent there for distribution; thus causing, as in many other places, a double distribution, each of which would cost the general post-office a commission of 7 per cent, if provision were not made to prevent it in New-York. The commissions on letters erroneously sent for distribution to the New-York office would, if charged, amount in one year to \$85,328; as it is, they are only saved by the employment of extra clerks, with much confusion and delay, and with much expense for clerk hire, to the department. Mr. Bowen computes the amount of money paid at

present by the department for double distribution; at \$800,000 per annum; which, he says, is less than one half what was formerly paid on the same account. A more simple scheme than that now in operation, and one that will save all these extra expenses, is that of single distribution, as proposed by this gentleman. It is not important that his plan should be exhibited here at full length; it is enough to say, that it is based on the present distribution scheme, that it is easily understood, and not difficult to be put into execution. It is hoped that the department will give the plan a fair consideration; for to such it is fully entitled, as having been matured by one whose experience in the practical working of the post-office system of this country gives weight to his opinions, and who deserves our thanks for the labor and expense which he has undergone in the preparation and complete explanation of the arrangement he proposes.

Rates of Internal Postage.—The new postage law went into operation on the 1st of July, 1851. According to this law, the postage on a letter not weighing over half an ounce, sent any distance in the United States, not exceeding 3,000 miles, is *three cents*, if paid in advance; and five cents, not prepaid. For any distance over 3,000 miles the rates are doubled. If sent wholly or in part by sea, or to or from a country with which the United States has

no postal treaty, the rates are *ten cents* for any distance under 2,500 miles, and *twenty cents* for any additional distance. A letter weighing over half an ounce, no matter how little, is charged double postage; and so every additional half ounce, or fraction thereof, is charged three cents, or five cents additional, according as the letter is or is not prepaid. Drop-letters or letters put in the post-office for delivery in the same place, are charged *one cent* each, whether prepaid or not. In all cases, the distance which a letter is conveyed is estimated by that of the post-road along which it is transmitted. Ship, steamboat, and way letters appear to be chargeable as before the passage of the law—*six cents* each, if delivered at the office of original reception, and *two cents* additional if forwarded to another office for delivery.

The postage on newspapers, pamphlets, etc., is determined by a complicated calculation. Its manner of adjustment is very unsatisfactory to the public, and in many cases the rate itself is decidedly higher (sometimes twice as high) than under the former regulations. It is not likely that these rates will continue long in force. They are best exhibited in the tabular form in which they were originally published on the 14th of June last, by the Postmaster General.

Rates, per quarter, when sent from the office of publication to bona fide Subscribers.

From and after the 30th of June, 1851, for each newspaper not exceeding three ounces in weight, the annexed rates per quarter are to be paid quarterly in advance. These rates only apply where the paper is sent from the office of publication to actual and bona fide subscribers.

	Daily.	Tw-weekly.	Semi-weekly.	Weekly.	Semi-monthly.	Monthly.
For any distance not exceeding 50 miles.....	Cents. 25	Cents. 15	Cents. 10	Cents. 5	Cents. 2½	Cents. 1½
Over 50 and not exceeding 300 ".....	50	30	20	10	5	2½
" 300 " 1,000 ".....	75	45	30	15	7½	3½
" 1,000 " 2,000 ".....	100	60	40	20	10	5
" 2,000 " 4,000 ".....	125	75	50	25	12½	6½
" 4,000.....	150	90	60	30	15	7½

DIRECTIONS.

- 1st. *Weekly Papers*, only when sent as above stated, are to be delivered free in the county where they are published, and this although conveyed in the mail over 25 miles.
- 2d. Newspapers containing not over 300 square inches, are to be charged one quarter the above rates.
- 3d. Publishers of newspapers are allowed exchange free of postage, one copy of each number only; and this privilege extends to newspapers published in Canada.
- 4th. The weight of newspapers must be taken or determined when they are in a dry state.
- 5th. Postmasters are not entitled to receive newspapers free of postage under their franking privilege.
- 6th. Payment in advance does not entitle the party paying to any deduction from the above rates.

Rates on Transient Newspapers and other Mailable Printed Matter.

NOTE.—For each additional ounce or fractional part of an ounce, beyond the ten ounces embraced in this table, an additional rate must be charged.

	Weighting one oz. or under.	Over 1 and not over 2.	Over 2 and not over 3.	Over 3 and not over 4.	Over 4 and not over 5.	Over 5 and not over 6.	Over 6 and not over 7.	Over 7 and not over 8.	Over 8 and not over 9.	Over 9 and not over 10.
Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate
When sent not over 500 miles.....	Cts. 1	Cts. 2	Cts. 3	Cts. 4	Cts. 5	Cts. 6	Cts. 7	Cts. 8	Cts. 9	Cts. 10
Over 500 and not over 1,500 ".....	2	4	6	8	10	12	14	16	18	20
" 1,500 " 2,500 ".....	3	6	9	12	15	18	21	24	27	30
" 2,500 " 3,500 ".....	4	8	12	16	20	24	28	32	36	40
" 3,500.....	5	10	15	20	25	30	35	40	45	50

DIRECTIONS.

1st. On every transient newspaper, unsealed circular, handbill, engraving, pamphlet, periodical, magazine, book, and every other description of printed matter, the above rates must in all cases be pre-paid according to the weight.

2d. Whenever any printed matter on which the postage is required to be pre-paid, shall, through the intention of postmasters or otherwise, be sent without pre-payment, the same shall be charged with double the above rates.

3d. Bound books and parcels of printed matter not weighing over 39 ounces, shall be deemed mailable matter.

Periodicals published at intervals not exceeding three months, and sent from the office of publication, to actual *bona fide* subscribers, are to be charged with one half the rates mentioned in the list of the above tables, and pre-payment of a quarter postage thereon must in all cases be required. Periodicals published at intervals of more than three months are charged with the full rate, which must be pre-paid.

In case there is on or in any newspaper, periodical, pamphlet, or other printed matter, or paper connected therewith, any manuscript of any kind by which information shall be asked for, or communicated in writing, or by marks or signs, the said newspaper, periodical, pamphlet, or other printed matter, becomes subject to letter postage; and it is the duty of the postmaster to remove the wrappers and envelopes from all printed matter and pamphlets not charged with letter postage, for the purpose of ascertaining whether there is upon or connected with it any such printed matter, or in such package any matter or thing which would authorize or require the charge of a higher rate of postage thereon.

Rates of Foreign Postage.—The rates of postage between the United States and Great Britain are determined by the postal treaty of May, 1849. Previous to this treaty, the British government enjoyed a monopoly of the sea-postage between this country and Europe. Even letters conveyed across the sea in our own vessels could not be delivered or posted in Great Britain, without the pre-payment to that country of the entire sea-postage. The postal treaty has totally changed this objectionable state of affairs; and the revenue derived from sea-letters, amounting annually to about \$1,000,000, instead of going wholly to one, is now divided between the two governments. The rates of postage, as established by the treaty, are as follows:

The entire postage between any office in the United States, (California and Oregon excepted,) and any other in Great Britain or Ireland, is *twenty-four cents*, for a letter not weighing more than half an ounce; *forty-eight* for one exceeding that weight; *ninety-six*, if the weight exceed an ounce, but not two ounces; the rate being doubled after the first ounce. The postage may be left unpaid; if paid, all that is due must be given at once, as fractional payments will be disregarded. Letters from or to Oregon or California are charged *five cents* more than the above mentioned rates. Of this postage on foreign letters, the British government, if it conveys the letter in its own packet, retains all but *five cents*. If a letter be carried over the ocean in an American steamer, that government retains, on collecting the postage, only *three cents* out of the whole, the rest being credited, and ultimately paid, to the United States.

Newspapers for Great Britain and Ireland are charged *two cents* postage, which must be pre-paid in America; but newspapers coming thence are paid for, at the same rate, when delivered. On pamphlets, books, and periodicals, the postage is *two cents* each, when weighing not more than two ounces; and *one cent* for every additional ounce, pre-paid, if sent from here, but not otherwise.

Letters sent to other foreign countries in or

out of Europe, which have to pass in their transit through Great Britain, must, if they are to be transported in an English steamer, have the United States postage, and that only, pre-paid; if sent by an American vessel, they must have both the inland and ocean postage pre-paid. Letters sent from the United States by one of our steamers, to any point on the continent of Europe where they touch, must be pre-paid, at the rate of twenty cents the half ounce. Newspapers, under the same circumstances, will pay two cents. The postage to Havana, in Cuba, recently twelve and a half cents per half ounce, is now ten cents pre-paid, if the letter be sent not over a distance of 2,000 miles; over 2,000 miles, the postage is ten cents the half ounce. The postage on letters sent to the British West Indies, which must be paid in advance, is the same as that charged upon letters forwarded to Cuba. The charge on newspapers is two cents. Letters sent to such of the West India Islands as are not British, are charged thirty-five cents the half ounce, for distances not over 2,500 miles, and forty-five cents for any distance over, to be pre-paid; as also letters coming thence. Newspapers are charged four cents. The postage on letters sent to South America is, in general, fifty cents per half ounce, pre-paid; on newspapers, &c., eight cents per ounce. Letters sent into Canada from any office in the United States, not over 3,000 miles from the Canada line, by the route travelled, are charged ten cents for the first half ounce, increasing proportionally for every fraction of a half ounce; over 3,000 miles fifteen cents; prepayment being optional.

Mailing of Newspapers.—Every facility for mailing and transmitting their newspapers, is granted by law and by usage to editors and publishers. If their mail is large, they are furnished with bags and allowed to make it up themselves, and transmit it without further examination; and yet, in case of miscarriage of papers, postmasters are held responsible, unless they can show that the fault lies with the publisher or the mail contractors. Packets of newspapers addressed to one office cannot be opened at another; and

if, by accident, a packet should lose its wrapper, the postmaster discovering it is bound either to re-direct it, or to return it to the publisher. And no postmaster is allowed to lend or to suffer to be read, in his office, any newspaper directed to another person; but to guard against fraud, he is not only permitted but required to take the wrappers off from papers which come to his office in envelopes—these wrappers not being counted part of the newspapers, and not being subject to postage.

Collection of Postage and Delivery of Letters.—Nothing but specie can be taken for postages; and postmasters are not authorized, in any case, to give credit. Postage on newspapers regularly subscribed for is to be paid quarterly in advance. Letters may be delivered only to the person addressed, or to one authorized to receive them, by order, which order, however, is sometimes implied. Letters delivered to the wrong person, and opened by him through mistake, must receive his endorsement to that effect, and be returned therewith to the post-office.

Letter Carriers and Mail Agents.—Postmasters may employ letter-carriers, who are qualified for their office, by giving to the United States approved bonds. Their compensation in large cities is *one cent* per letter; in small cities, *two cents*, as formerly; on each paper they are entitled to $\frac{1}{2}$ cent. It is the duty of the mail carrier to receive and convey all letters to the post-office which are handed to him more than a mile from the office. Beside these carriers, there are employed (by the Postmaster-General) on certain railroad and steamboat routes, *mail agents and mail messengers*, who are qualified by taking the required oaths, and who, like mail carriers, are exempt from militia and jury duty.

Postage Stamps and Advertising Letters.—Postage stamps, of the denomination of *one, three, and twelve cents*, may be purchased to any amount, at important offices; and these answer all the purposes of money, and are, in some respects, more convenient for the prepayment of postage. Such a stamp is cancelled by the postmaster in whose office the letter bearing it may have been deposited. Letters remaining uncalled for in any office are to be *advertised* every week, or less frequently, according to a fixed rule, in the paper of the place in which the office is situated which has the largest circulation, at the rate of one cent per letter. If there be no paper in the town, or if the list be refused, the postmaster must post up, in a conspicuous place, a manuscript list of the letters in question.

The Franking Privilege.—Certain citizens and officers of government are entitled to freedom of postage on their letters and packets: among these are Mrs. Harrison, Mrs. Taylor, any person who has been President of the United States, the Vice-President, members of Congress, and delegates from territories, the

governors of states, the three assistant postmasters-general, and certain postmasters, each, however, under given restrictions. Besides these, publishers of newspapers, periodicals, etc., not exceeding 16 oz. in weight, may exchange with each other, postage free. The franking privilege is purely personal: it travels with its possessor, and can be exercised only in one place at the same time. Franks cannot be left behind on envelopes for letters to be written by another person; yet this rule is perpetually violated, without reflection, by members of Congress. Postmasters, whose yearly receipts do not exceed \$200, can frank letters to publishers of newspapers, as their *agent*, for the agency being taken for granted by the appearance of the frank. The free matter sent to and from Washington, during the last two years, would have realized \$1,795,920, at the present rates, and \$4,240,820 at the rates in force a year ago; and this not counting newspapers, etc. This abuse of the privilege requires legislative action.

Lost Letters, &c.—Money or any valuable property transmitted by the mail, is at the risk of the owner. If a letter is lost, the department will make every effort to recover it, and to punish any one who has been the cause of the loss. To assist it in its efforts to do so, the loser should forward to Washington all the particulars which he can collect respecting the mailing of the letter, etc. Should not the letter or money be recovered after all, there is no remedy; the courts have frequently decided in favor of the department, and there is only in certain cases a remedy against the postmaster. The postmaster is liable for the loss, if it can be proved that it was sustained in consequence of his negligence.

Expenses and Receipts of the Department.—The entire expenditure of the last year, as given in the Postmaster-General's late report, (Dec., 1851,) amounted to \$6,278,401; but this includes a payment made to Great Britain, and a payment under an award. The ordinary expenditure was \$6,024,566. The receipts during the same period amounted to \$6,786,493; of which \$5,369,342 were derived from letter (including foreign) postage and stamps sold, and \$1,035,180 from postage on newspapers, periodicals, etc. Allowance must be made here for the sum payable to Britain, and for that for additional appropriations. These allowances made, the ordinary revenues are \$6,551,977, being an increase of \$999,006 over those of the preceding year, and a balance of \$527,411 over the proper expenditures of the present year. The estimated expenses for the current year are \$7,123,448. The reduced rates on printed matter, and the extension of the exchange privilege to publishers, will alone, it is thought, reduce the revenue for the current year \$500,000. If all the free matter carried in the mail were charged with postage, it would, at the present rates, add to the rev-

enue between \$1,000,000 and \$2,000,000 per annum.

In his late report, Mr. Hall recommends that the rates on letters remain as they now are, but that not more than two, or at most three, rates of inland postage should be fixed on newspapers sent to subscribers, and that the postage on transient newspapers and other printed matter should be more nearly assimilated to the ordinary newspaper rates. "It is difficult," he says, and the remark is worthy of serious consideration, "to assign a sufficient reason for charging upon such periodicals as

the reviews, the numerous magazines, and theological, medical, and law periodicals, more than three times the amount of postage charged for the same distance upon an equal weight of newspapers. Such periodicals are less ephemeral than the ordinary newspapers, and certainly not less beneficial in their influence." It is hoped that Congress will take this matter in hand during the present session, and reduce to something like regularity and fairness our present anomalous system of newspaper and periodical postage.

APPENDIX L.—Statement of the number of Post-offices, the length of Mail Routes, and extent of Mail Transportation in the United States, and of the Amount of Receipts and Expenditures of the Post-office Department, under appropriate heads, in each year, from 1840 to 1851, inclusive.

YEARS	Number of Post-offices	Length of Post-roads	MILES TRANSPORTATION.		RECEIPTS.	
			Rail road and steamboat	Other modes of conveyance	Letter postage	Newspapers and pamphlets
1840.....	13,468	155,730	3,880,053	32,481,723	4,003,776 07	535,329 61
1841.....	13,778	155,086	3,940,450	31,950,075	3,812,788 61	566,245 46
1842.....	13,783	140,732	4,424,262	30,411,729	3,953,315 20	572,925 25
1843.....	13,814	142,295	5,092,402	29,560,403	3,738,307 54	543,277 30
1844.....	14,103	144,687	5,747,355	29,662,269	3,676,161 53	549,743 83
1845.....	14,183	143,940	6,484,592	29,149,677	3,660,231 38	608,765 22
1846.....	14,601	149,679	7,781,828	29,616,670	2,881,697 74	763,142 49
1847.....	15,146	153,818	8,084,922	30,800,977	3,198,957 43	643,160 59
1848.....	16,150	163,908	8,713,300	32,990,379	3,340,304 10	767,334 85
1849.....	16,747	167,703	8,945,153	33,598,916	3,882,762 62	819,016 20
1850.....	18,417	178,672	10,634,574	35,006,849	4,575,668 86	919,485 94
1851.....	19,796	192,026	13,855,200	38,849,069	5,369,242 76	1,035,120 80

Appendix I. continued.

YEARS	RECEIPTS.		EXPENDITURES.			
	All other receipts	Total of receipts	Paid for transportation	Compensation to Postmasters	All other expenses	Total of expenditures
1840.....	4,516 24	4,543,581 92	3,313,048 61	1,090,477 90	475,745 13	4,718,235 64
1841.....	28,742 20	4,407,726 27	3,034,813 91	1,031,370 22	443,334 48	4,499,727 61
1842.....	1508,966 30	5,029,506 65	4,192,196 06	1,041,535 15	441,020 55	5,674,751 76
1843.....	14,640 50	4,296,225 48	2,982,512 47	995,009 57	397,231 67	4,374,763 71
1844.....	11,382 47	4,237,287 83	2,912,946 78	969,230 20	395,885 79	4,296,512 70
1845.....	1770,845 20	4,439,841 80	2,896,630 48	1,033,118 06	388,989 45	4,320,731 99
1846.....	7645,249 74	4,069,089 97	2,597,454 69	1,042,079 74	444,798 02	4,084,332 43
1847.....	1171,329 12	4,013,447 14	2,476,455 68	1,060,228 19	434,591 25	3,971,275 12
1848.....	53,438 90	4,161,077 85	2,545,232 19	1,254,346 65	527,272 50	4,326,850 27
1849.....	3,397 46	4,705,176 28	2,577,407 71	1,390,921 34	680,730 08	4,479,049 13
1850.....	4,835 06	5,499,934 86	2,965,786 36	1,549,376 19	697,790 88	5,212,953 43
1851.....	6,236 68	6,410,604 33	3,538,063 54	1,781,626 34	958,651 30	76,278,401 68

REFERENCES TO APPENDIX L.

(a) Including \$210,205 28 received for letter postages of the Government. (b) Do. \$163,505 48 received for do. do. (c) Including \$35,611 22 of British postages. (d) Including \$147,063 82 of British postages. (e) Including \$58,625 44 of British postages. (f) Including \$22,089 81 received for newspaper and pamphlet postages of the Government. (g) Including \$20,942 59 received for ditto. (h) Including \$482,657 drawn from the Treasury under the act approved 9th September, 1841. (i) Including \$150,000, drawn from the Treasury under the 21st section of the act of 3d March, 1845. (j) Including \$600,000, drawn from the Treasury under section 21 of the act of March 3d, 1845. (k) Including \$125,000, drawn from the Treasury under the 2d section of the act of the 19th June, 1846. (l) Including \$233,235 40 paid for British postages.

J. MARBON, Third Assistant Postmaster-General.

Post-office Department, November 22, 1851.

APPENDIX II.—*The following table shows very nearly the number of Post-offices in each State and Territory on the 30th day of June last, classified according to the compensation allowed to each Postmaster, for the fiscal year 1850-51.*

STATES	\$2,000	\$1,000 to \$2,000	\$500 to \$1,000	\$400	\$300	\$200	\$100	\$50 to \$100	\$25 to \$50	Under \$25	Total
Maine.....	1	6	13	5	21	9	62	146	171	234	663
New-Hampshire.....	—	5	5	1	12	16	55	95	72	94	355
Vermont.....	—	3	10	5	7	27	77	104	87	62	362
Massachusetts.....	6	14	30	28	44	60	187	137	93	41	586
Rhode Island.....	—	4	3	1	—	2	17	15	22	10	74
Connecticut.....	1	6	11	8	21	39	65	69	74	45	339
New-York.....	6	81	56	34	64	118	367	527	537	569	2,319
Delaware.....	1	—	—	1	4	3	8	9	19	22	60
New-Jersey.....	1	5	7	4	6	12	35	79	95	150	394
Pennsylvania.....	3	13	30	19	24	66	163	303	418	751	1,790
Maryland and District of Columbia.....	3	4	2	4	4	15	37	72	93	103	337
Virginia.....	2	8	9	12	13	28	92	171	303	658	1,296
North Carolina.....	—	8	5	7	6	15	28	65	96	560	783
South Carolina.....	1	2	9	2	5	13	18	31	118	285	484
Georgia.....	1	8	7	6	13	17	67	88	153	306	658
Florida.....	—	1	4	2	1	5	8	9	22	63	108
Alabama.....	1	3	10	7	8	7	49	101	123	271	580
Mississippi.....	—	6	6	4	9	17	46	74	90	302	563
Louisiana.....	1	—	1	2	3	6	25	35	36	97	218
Arkansas.....	—	1	1	4	2	6	12	37	63	211	328
Texas.....	—	1	4	2	7	6	33	33	47	178	310
Tennessee.....	1	2	11	4	5	16	43	82	127	469	760
Kentucky.....	—	6	12	6	8	16	58	85	116	362	609
Ohio.....	2	16	81	17	23	49	218	358	396	665	1,640
Michigan.....	—	8	14	3	11	13	48	69	112	272	544
Indiana.....	—	8	10	6	12	22	68	125	300	436	806
Illinois.....	1	7	15	7	21	45	84	145	303	498	1,026
Missouri.....	1	1	9	5	6	17	54	82	97	320	562
Wisconsin.....	—	4	9	2	10	18	32	67	84	281	477
Iowa.....	—	4	3	8	3	7	24	31	69	100	204
California.....	5	4	—	1	2	—	7	6	4	6	34
Utah.....	—	—	—	—	—	—	—	—	—	—	1
New-Mexico.....	—	—	—	—	—	—	1	—	—	—	2
Nebraska.....	—	—	—	—	—	—	—	—	—	2	2
Minnesota.....	—	—	—	—	—	1	2	1	1	10	16
Oregon.....	—	1	2	—	—	1	2	4	2	19	31
	36	179	347	308	381	607	3023	3379	4066	8399	19,796

APPENDIX III.—*Statement of the number of Post-offices and length of Post-roads in the United States, the annual amount paid for Mail Transportation, and of Receipts and Expenditures of the Post-office Department at periods of five years, from 1790 to 1835, inclusive.*

YEARS	Number of Post-offices	Length of Post-roads	Paid for transportation	Receipts	Expenditures
1790.....	75	1,875	92,081 00	37,935 00	32,140 00
1795.....	463	13,207	75,359 00	160,620 00	117,893 00
1800.....	903	20,617	128,644 00	280,804 00	213,994 00
1805.....	1,558	81,076	339,635 00	491,373 00	377,367 00
1810.....	2,300	36,406	337,966 00	551,684 00	491,969 00
1815.....	3,000	43,748	487,779 00	1,043,065 00	748,121 00
1820.....	4,500	72,493	782,425 00	1,111,937 00	1,160,926 00
1825.....	5,677	94,032	785,616 00	1,366,595 00	1,379,043 00
1830.....	8,450	116,176	1,272,156 00	1,919,300 00	1,959,109 00
1835.....	10,770	142,774	1,533,222 00	3,162,376 00	2,585,108 00

J. MARION, Third Assistant Postmaster-General.

Post-office Department, Nov. 28, 1851.

POST SYSTEM—ANCIENT.—One of the most important steps taken by Cyrus, when he had subjugated the kingdom of Babylon, was to create an establishment similar to our modern posts, by which the most speedy intelligence was conveyed throughout the whole extent of his vast empire. Between Sardis, the capital of Lydia, and Lusa, the residence of the Persian king, there are computed to have been one hundred and eleven houses. The distance of the road has been estimated at 13,400 Greek stadia, nearly equal to 1,840 geographical miles. From the errors of transcribers, however, as appears from a note to Macpherson, there is some apparent disagreement upon this point, and commentators have consequently been much puzzled in reconciling the remote distances by which the houses were separated. We may regard the inference which has resulted, that some of the stages are evidently omitted, as a legitimate one, though we may not conceive fully the advantages resulting from the fact as conducive to any very important end.

Italy appears to have been the cradle of the system of posts. Constituted principally with the view of obtaining intelligence from the army, under the Emperor Augustus, it was in the most flourishing condition, and the couriers employed were remarkable for their extraordinary swiftness. Dispatches from Slavonia were received by Augustus in four days, and Tiberius is said to have indignantly thrown away all dispatches that were more than twenty days from Asia, fifteen from Europe, ten from Africa, five from Slavonia, and three from any part of Italy. Such was the expedition to which the ancients were accustomed. The privacy of letters was so much respected, that the breaking of a seal was, by the criminal code of Milan, punished with death.

During the ninth century, messengers who travelled on horseback existed in Germany, France, and Italy, devoted exclusively to the government service. The establishment, however, seems to have been of but short duration.

In the East carrier pigeons are used. They became known in Europe through the Crusaders, but seem never to have been introduced to any extent in more recent years. The carrier pigeon is a native of the East. An actual post system, says Leiber, was established by the Sultan Moureddin Mahmood, who died in 1174, in which pigeons were the messengers. It was extended and improved by the Caliph Ahmed Abraser-Lidiv-Allah of Bagdad, who died in 1225. When that city fell into the hands of the Mongols in 1258, this flying post was destroyed by them. The manner of using them is by placing a particular kind of silk paper, called *bird paper*, lengthwise under one wing, and fastened with a pin to a feather, the point of the pin being turned from the

body. They have been known to accomplish a distance of upwards of one thousand parasangs, more than 2,700 English miles, in a day. According to the elder Pliny, Decius Brutus sent dispatches from Modena by pigeons. They were in much later times employed by the merchants of Paris and Amsterdam to convey the course of exchange and the prices of stocks from one city to the other. And in our day, the velocity of their movements has much anticipated those of the steam engine.

Part of the post system of the Great Mogul is conducted by means of pigeons. They are kept in several places for the conveyance of letters on extraordinary occasions, and they carry them from one end of that immense empire to another. The Dutch within Seizes have resorted to the same vehicles. The Consul at Alexandretta is said by Tavernier to have been accustomed to send news daily to Aleppo in five hours' time by means of pigeons, though these two places are three days' journey apart on horseback.

Pedestrian messengers were maintained by the University of Paris in the beginning of the thirteenth century, who, at certain times, took charge of money and letters for the students, collected in that city from almost all parts of Europe.

Posts, upon the authority of Lewis Hornick, were first settled in Germany by the Count de Taxis, at his own expense, in acknowledgment of which the Emperor Mathias in 1616 gave him in fief the charge of postmaster under him and his successors. This point, however, is not very clearly established.

In 1295, throughout Cambula, in the province of Cathay, two days' journey from the ocean, inns were established at proper distances, where horses, provisions, and lodgings were kept for the khan's ambassadors and messengers, and ferry boats were stationed also at the rivers and lakes. By these means letters were conveyed at the rate of from 200 to 250 miles in a day.

On the road from Cuzco to Quito messengers were found placed at short distances from each other, when the Spaniards discovered Peru in 1527. The orders of the Inca were transmitted by them with remarkable speed.

About 1740 the Turks commenced the establishment of posts after the manner of Christendom, throughout their entire dominions. It was generally expected that they would operate very advantageously to their commerce, independent of the large addition which would be made to the sultan's revenue, which, in consequence of the late wars with Russia, had become greatly impaired. We see very clearly, therefore, that in an age far removed from the one in which we live, the benefits to be derived from this system judiciously administered had forcibly impressed themselves upon the minds of all people of all nations. Indeed, it is difficult to conceive

a state of society in which an approach to civilization and refinement will not originate an establishment like this. Mr. Ellis, in his "Polynesian Researches," says, that though the natives of the Sandwich Islands have not so far advanced in civilization as to have a regular post, a native seldom makes a journey across the island, and scarcely a canoe passes from one island to another, without conveying a number of letters.

The system of posts in England has attained to a very great perfection, and it is remarkable to observe the many changes through which it has passed from its infancy, so far as we have been instructed, to the present time. King Edward introduced an establishment of riders with post horses, to be changed every twenty miles, during the war with Scotland in 1480. By handing letters and packets from one to another, they were forwarded 200 miles in the course of two days, apparently the farthest extent of the establishment. This mode of conveyance was taken from one France had adopted a short time previously, neither of which tended to the public accommodation, or had any connection with commerce. We can only regard them, therefore, as the rudiments of an establishment, constituting, as it has well been said, the most essential accommodation ever given to commerce and friendly intercourse.

It may not be uninteresting to many of our readers to trace the gradual growth and extension of this branch of the public service in a country like England, where, as is clearly evident, it has been carried to as high a state of perfection as in any other country on the face of the globe. Considerations of economy have always failed to exercise the same influence with the English nation, when opposed to great national objects, to which, in our country, it seems the bent and policy of the people to give them. Republican simplicity is not at variance with grand designs, conceived for the general benefit, and tending to the establishment of a great national end.

In 1631, William Frizell and others obtained a grant of the office of Postmaster for foreign parts in reversion. King James, it would appear, had previously erected this office, but previous to this appointment private undertakers only conveyed letters to and from foreign parts. Subsequently, however, it was strictly enjoined that none but the foreign postmasters would presume to exercise any part of that office.

A running post was established by King Charles, in 1685, between London and Edinburgh, to go and come in six days, and to take all such letters as should be directed to any post-town in or near the road. By-posts were also required to be placed at different points, to bring in and carry out letters from Lincoln, Hull, and other places. The postage was fixed at 2d. the single letter, if under 80

miles; 4d. between 80 and 140 miles; 6d. if above 140 miles, and upon the borders of Scotland, and in Scotland, 8d., and proportionally for double letters and packets. Unless to such places as the king's post did not go, messengers were not permitted to carry letters, except such as were common known carriers with a letter to a friend.

Notwithstanding King Charles's proclamation, letter carriers appear to have been still in use in 1687, between England and France. An agreement was formed between the heads of these two nations, by which the route was made from Dover to Calais, and thence to Paris by Bologne, Abbeville, and Amiens. All private posts were prohibited, and a renewal made of the former declaration of the several rates of postage as exhibited under the year 1685.

The postage of England, Ireland and Scotland was farmed by the Council of State to John Manley, Esq., in 1652, for £10,000 yearly. Under this settlement the rate of postage varied but slightly from that of 1635.

A new general post-office for the Commonwealth of the three kingdoms was erected by the Protector and his Parliament in 1656. The regulations by which it was governed were confirmed at the restoration of Charles the Second.

By act of Parliament, in 1660, the rates of postage for England and Ireland were slightly modified. The revenue for the year amounted to £21,500.

In 1676, Sir William Petty, considered to have been well versed in the theory of commerce, is said to have written his political arithmetic. In his remarks upon the system of posts, he computes the postage of letters from the year 1636 to 1676 as having increased from one to twenty. "The very postage of letters costs the people," he says, "£50,000 per annum, farmed at much less."

The penny post was established in London and its suburbs about 1583, by a man whom history has handed down to us as an upholsterer by trade, named Murray, who afterwards assigned it to one Dockwra, who carried it on successfully for a number of years, till a claim was laid to it by the government as interfering with the general post-office, which was part of the crown revenue. Dockwra, in consequence, had a yearly pension of £200 settled on him for life.*

In 1685, the revenue of the general post-office, estimated at £85,000 per annum, was settled by the Parliament upon James the Second, to be his private estate, and never to

* A writer in Rees' Cyclopædia, vol. 29, Art. "Post," says, "The penny post was first set up in London in or about the year 1683 by a private undertaker, to whose assigns government allowed a yearly pension of £200 a year for life, in lieu of the revenue arising from it."

be accounted for by him, as is the case with all public revenues.

We have noticed thus far the regular increase of the revenue derived from this source, and the farther we advance the more rapid will its growth and development be made to appear. In a printed letter to a member of Parliament concerning the debts of the nation, published in 1701, the net revenue of the post-office for the year 1699 is said to have been £90,504 10s. 6d. It was still at this time a part of the king's private revenue.

The correspondence of Scotland was found unable at this time to support itself, and King William, in consequence, made a grant of the whole revenue to Sir William Sinclair, with a pension of £300 a year. Finding it to operate disadvantageously to his interest, Sir William gave up the grant. The revenue arising to the government became soon after, however, very considerable.

One general post-office, as well as one general postmaster, was appointed for the United Kingdom in 1711, and all former laws repealed. The chief letter offices were located at Dublin, Edinburgh, New-York, and the West Indies. The postage on letters was increased, and the revenue, including the penny post, amounted to £111,461 17s. 10d.

Eleven years after this, from an abstract of the public debts, by Archibald Hutcheson, Esq., it appears that

The gross amount of the P. O.	
annual revenue was.....	£201,804 1 8
To be deducted	
for frank covers	
to letters £38,397 12 3	
Expense of management....	70,896 1 5
	<hr/> £108,793 13 8

Net produce for 1722..... £98,010 8 0

Up to this time members of Parliament and other privileged persons were accustomed to frank letters by signing their names on the corners of blank covers. To this manner of ranking there seems to have been many objections, apart from its being subject to forgery. Of one fact there appears to be no doubt, that the revenues of the office were greatly injured from its operation. It was discovered, among other things, that the servants of members would solicit and receive from their masters large quantities of these franks, and would then dispose of them to persons who made a business of openly selling them in the streets. It was therefore enacted, that after the 1st of May, 1764, "no letters should be exempted from postage but such as not exceeded 2 oz. in weight, sent to any part of Great Britain or Ireland *during the session of Parliament*, or within forty days before, or forty days after, any summons

or prorogation of the same, *the whole of the superscription being in the handwriting of a member of the House of Lords or Commons.*" The forgery of franks was, by the same act, rendered punishable by transportation for seven years.

The postage of franked letters, on an average of several years, was equal to £170,000 a year, as appeared from an examination previous to the passage of this act. Under the new regulation a great portion of this large amount was added to the revenue. The gross revenue of the post-office this year amounted to £281,535. As we have seen, it was farmed in the year 1664 for £21,500; and twenty years earlier it was estimated at only £5,000. The increase of commerce, and the increased facility and dispatch in the conveyance of letters, necessarily promoted the increase of correspondence.

The rates of postage were increased in 1765, and ships bringing letters were obliged to deliver them at the post-office. The postmaster-general was empowered to establish penny posts in any part of the kingdom he thought proper, and it was made felony to be found guilty of the embezzlement of letters, or of committing a robbery upon the mail.

PENNSYLVANIA.—ITS EARLY HISTORY, AND PROGRESS IN POPULATION, COMMERCE, TRADE, MANUFACTURES, AGRICULTURE, EDUCATION, &c.—Pennsylvania is the only state in the Union which bears, and transmits to future ages, the name of a private individual. It is known that the natural modesty of William Penn earnestly declined the honor of having his name latinized into that of a great American province; but Charles II. of England insisted upon Pennsylvania, as being the most beautiful and appropriate name that could then be devised. It must be admitted, however, that the territory in question has now lost much of the sylvan character that it must have possessed in the days of Charles II. However great Penn's obligations may have been to the "merry monarch" for the honor conveyed in the name Pennsylvania, it is quite certain that the soil of the territory ceded to Penn, by Charles II., was far from being a gift.

William Penn inherited from his father, Admiral Penn, who acquired some distinction as commander of the English fleet at the conquest of Jamaica, and in the subsequent war with the Dutch, a large fortune, to which he added remarkable abilities, both natural and acquired. His education, however, was somewhat irregular, owing to circumstances resulting from his stubborn inflexibility of purpose in all things, and particularly in regard to his religious principles. While a student at Oxford he imbibed the principles of the Quakers, and he is said to have been expelled from the University "because he would per-

sist in pulling from the backs of his fellow-students those popish and unnecessary badges, their gowns."

Among other things which Penn inherited from his father—and this was, in the end, his greatest inheritance—was a claim against the government, of £16,000, of which the Admiral had been plundered at the shutting up of the Exchequer. This claim, for which there was little hope of ever getting any thing, (as Charles II. was notoriously extravagant, profligate, always in want of money, and, like all such men and monarchs, slow in paying debts,) was the real cause of Penn's coming to America, though the reiterated persecutions and imprisonments to which his peculiar religious notions exposed him may have had some influence. Penn, as a last chance of getting any thing for his claim, proposed to accept a grant of American territory, which was at that time very abundant, and not particularly valuable. To obtain, however, even such a liquidation of the claim as this, required some tact and exertion.

Penn was fortunate in having the support of the Duke of York, who had always been the particular friend of the late Admiral, his father, and who was always an admirer of the principles of non-resistance, though not the Quakerism of the son. William Penn himself, though mild, gentle, and anti-bellucose, was far from unskilful, as his biographers tell us, in the arts of a courtier, which he practised, in the present case, with double energy and effect in his guise of drab-colored Quaker plainness. After the usual vexations and delays of all suitors for government favor or justice, he finally succeeded, and on the 4th of March, 1681, in the thirty-seventh year of his age, was constituted, by a royal charter, "sovereign of a great American province called Pennsylvania." The charter created him "true and absolute lord" of Pennsylvania, with property in the soil, and ample powers of government, with the exception, that "the advice and consent of the freemen of the province" were necessary to the enactment of laws. There were also some other exceptions which were common to all, or to the most of the other provinces.

At the time of Penn's receiving his charter there were already within the limits of Pennsylvania quite a number of settlements. At the mouth of the Schuylkill dwelt a large number of Swedes and Dutch, and the English had settled along the west bank of the Delaware, under grants from the governors of New-York.

Pennsylvania was colonized by the Swedes nearly forty years before William Penn received his grant of the territory from Charles II. As early as 1643, the Swedes had erected a fort on the island of Tinicum, in the Delaware river, a few miles below Philadelphia; and this island also was chosen by their gov-

ernor, John Printz, as the place of his residence. The first Swedish settlement in America was that formed by the colony sent out by Gustavus Adolphus, King of Sweden, in 1638, on Christiana Creek, near Wilmington. From this place, in order to preserve their ascendancy over the Dutch, who were jealous of them, and looked upon them as intruders, they had extended their settlements in various directions, until finally the whole territory occupied by them extended from Cape Henlopen to the falls of the Delaware, opposite Trenton, and to this tract of country they gave the name of New-Sweden.

The first work of Penn was to conciliate the Swedes. Accordingly he commenced by sending among them the royal proclamation, announcing the recent grant to him, along with a proclamation of his own, in which he assured his new subjects that they should "live free under laws of their own making." Penn's object in coming to America was not gain or power altogether, for his ambition did not stop at such objects. He had a higher and nobler aim—that of opening an asylum in the New World, where those deprived of civil and religious liberty in the Old might find a peaceful home.

To induce emigration, he published a flattering account of the province, and offered to sell lands to settlers at the rate of one hundred acres for \$10.* Three ships filled with emigrants, mostly Quakers, left England for America the same year in which the charter was granted, 1681. The first vessel took out William Markham, as agent, proprietor, and deputy-governor. Only one of these vessels arrived safe, one having been blown off to the West Indies, and another was frozen up in the Delaware. Markham carried out with himself three commissioners, together with a plan of a city which Penn proposed to build, and a letter of friendship from Penn to the Indians, whom he addressed as "brethren."

In the following year, 1682, Penn drew up what he called a "Frame of Government" and a code of laws, which were to be submitted to the colonists for their approval. His "Frame of Government" Penn pronounced "extraordinary," because of the "matter of liberty and privilege" which it contained; and because, he further states, of its leaving to himself and his successors "no power of doing mischief—that the will of one man may not hinder the good of the whole country." By this "frame" or constitution of Penn, the executive authority and the proposal of all laws were to be vested in a council of 72 persons, elected by freemen for three years, and one third of them to go out of office annually. The proprietary

* The lands were, however, subject to a perpetual quit-rent of about $\frac{1}{4}$ mills on each acre; and the purchasers were also to hold lots in a city to be laid out.

or his deputy was to preside over this council, and have a triple vote. All laws passed by this council were to be submitted to an assembly of from 200 to 500 members, chosen by the people. At first the entire body of freemen composed this assembly.

Penn also obtained from the Duke of York, who claimed some territories on the west bank of the Delaware, a quit-claim to Pennsylvania, and a grant of a circle of territory of twelve miles around Newcastle, together with all the territory now embraced in the state of Delaware. Having made these arrangements, he set sail from England in September, 1682, with one hundred emigrants. Twenty-three other ships followed him in the same year, and all arrived safely. Penn landed at Newcastle with only seventy of his emigrants, thirty having died of small-pox on the passage. The number of people then in Pennsylvania was between two and three thousand—all, as Penn says, "a plain, stout, industrious people," and the land abounding in all that "an Abraham, Isaac, and Jacob would be well contented with." The first business of Penn after his arrival was to call together the members of the first Assembly of the province. Instead of an attendance of the entire body of the freemen of the different counties, as Penn's "Frame of Government" proposed, there came only seventy-two delegates from the people of the entire province, bearing a petition to Penn that they might be considered as constituting both council and assembly. The reasons assigned for this entire disregard of the "Frame of Government" were "the fewness of the people, their inability in estate, and unskilfulness in matters of government." Penn, therefore, to meet these difficulties, remodelled his "Frame of Government," so that the assembly was to consist of thirty-six members only; and the council, of three members from each county; also he himself, or his deputy, when presiding, was no longer restricted to a triple vote, as before.

Several enactments were made. One naturalized the Dutch and Swedish settlers; another made every freeholder and tax-payer a freeman, with theright of voting and holding office: "faith in Christ," though, was an indispensable qualification. Toleration was extended to all who believed in the existence of God, whom they were allowed to worship after their own manner, except that none were allowed to labor on the Sabbath. This promised toleration, however, was not extended to the Roman Catholics, at least in the early days of the colony.*

The offenses expressly prohibited and severely punished were, "drinking healths, prizes, stage-plays, cards, dice, May-games, masques, revels." The criminal code was mild, murder being the only crime punishable

with death. County courts were established for the administration of justice, with trial by jury. The right of primogeniture was only partially abrogated, the oldest son being allowed, as in New-England, a double share of all his father's lands.

All the laws regarding property, crimes, and the rights of citizens, comprised a code, called the "Great Law;" and there was a special provision, that the substance of all the laws should be taught in all the schools—an idea that it would be well to adopt at the present day. A knowledge of the laws of our own country is indispensable, and in all of our schools a correct idea of the substance of them might, and ought to be imparted to the pupils. The idea that a pupil cannot learn any thing about laws except in a law-school, is only ridiculous. Pupils are often inquisitive regarding the law on various subjects, and they are generally put off, by being told that when they are a little older they can study law. William Penn's idea of this matter, in 1682, was the correct one, and we would like to see it adopted at the present day. It would be a most salutary reform in our schools if William Penn's idea could be adopted.

After thus establishing the government and laws of the province, Penn hastened to Newcastle to confer with Lord Baltimore regarding the southern boundary of Pennsylvania. Baltimore's charter extended to the 40th degree of north latitude, while that of Penn fixed, as the southern boundary of Pennsylvania, a line running due west from a point on the Delaware, 12 miles above Newcastle, which point was supposed to be about the 40th parallel. Astronomical observations taken by the two parties proved that the 40th parallel crossed the Delaware above the junction of the Schuylkill, thus rendering the two charters irreconcilable. The dispute between Penn and Baltimore resulted in a downright quarrel, which was not settled during the lifetime of either party. Penn's great desire was to acquire for Pennsylvania a portion of Chesapeake bay.

Soon after his visit to Lord Baltimore, at Newcastle, Penn held his famous interview with the Indians, under the great elm of Shakamaxon, commemorated by the pencil of West. The spot is now the site of Kensington, one of the suburbs of Philadelphia. Here the chiefs of the Delawares, with their armed warriors, met Penn and his unarmed associates, the latter all clad in the simple Quaker garb, which the simple Indians regarded as the habiliments of peace. Penn gave them the stipulated price for their lands, and established with them peace and friendship.

A few months after, in 1683, Penn purchased of the Swedes a tract of land at the confluence of the Delaware and Schuylkill, disregarding entirely the pretensions of Lord Baltimore, and immediately proceeded to lay

* See Hildreth's Hist. of U. S., p. 36.

out the city of Philadelphia. New settlers from England soon arrived, and at the end of the year 82 houses were erected. Many of the first settlers at Philadelphia dwelt in caves dug in the banks of the Delaware, until houses could be built.

During the year 1683, Penn convoked the Assembly of the province at Philadelphia. It provided for a revenue of £2,000, for the expenses of the government in part, to be raised by a tax on spirits. It also established an orphan's court, and appointed three officers in each county, called "peacemakers," to settle disputes and prevent law-suits. He caused a large mansion-house to be erected for his residence, on the banks of the Delaware, opposite Burlington, some 20 miles above Philadelphia.

In August, 1684, Penn left for England, appointing five commissioners of the provincial council as a provincial court, with Nicholas Moore for chief justice. This was the supreme court of law. The executive administration was committed to the council, of which Thomas Lloyd was appointed president. At Penn's departure, the province contained 20 settled townships, and 7,000 inhabitants, of which 2,000 were in the city of Philadelphia. English Quaker emigrants, and also some Dutch and German Quakers, converts made by Penn and Barclay on the continent, continued to arrive. It was by a party of German Quakers that Germantown was settled.

During Penn's absence in England, violent dissensions arose between the council and the assembly; the latter, contrary to the "Frame of Government," assumed the right of suggesting laws, a right expressly given to the governor and council alone. The assembly strove constantly to enlarge its powers, and resorted to the most violent measures. Moore, the chief justice, and also a member of the assembly, was expelled from it for opposing its usurpations, and impeached for arbitrary conduct in office; and his secretary also was imprisoned for refusing to give up the records. To put an end to these difficulties, Penn intrusted the executive authority to five commissioners, of whom Moore and Lloyd were two, the latter being the president. Lloyd, it seems, sowed dissensions among the colonists, and got them to believe that Penn had enriched himself at their expense. Penn denied the charge, and complained of the conduct of the assembly and of Lloyd, who finally resigned his office. Penn then appointed John Blackwell as lieutenant-governor of the province, with all the executive authority. Blackwell was very unpopular, and a year of violent discords followed. To restore peace, Penn placed the executive authority in the hands of the council again. (Feb. 1690.)

In 1687, a printing press, the third in America, was set up at Philadelphia. In 1689, Penn established a public high-school,

with a charter. In the same year, James II., Penn's great patron and firm friend, was driven from his throne; and Penn was twice arrested, in England, on a charge of treasonable correspondence with the fugitive king, but was discharged for want of proof. He now again began to think of returning to America, and of building a new city on the banks of the Susquehanna.

In 1691, Penn was again accused, and compelled to keep himself concealed. In 1692 his provincial government was taken from him, and transferred to Governor Fletcher, of New-York, who, in 1693, united Pennsylvania and Delaware, and extended his authority over both. In 1694, the suspicions against Penn being removed, Pennsylvania was restored to him, with all his rights. The chief instigator of the movements against Penn, which led to the depriving him of his provincial government, was one George Keith, a Scotch Quaker, who renounced his Quakerism, embraced the Church of England, and commenced a violent opposition against his former Quaker friends. Besides declaring Quakerism inconsistent with the exercise of political authority, he also preached abolition doctrines in the streets of Philadelphia, declaring that negro slavery was inconsistent with the principles of good government. Bradford, the only printer then in Pennsylvania, was called to an account for giving countenance to the movements of Keith; and to escape further difficulties, after obtaining his discharge, he removed his press and types to New-York city—the first printing press there erected. Keith went to England soon after, (1692,) and by his representations induced the Privy Council to deprive Penn of his government.

Penn arrived a second time in America on the 10th of December, 1699, and found the colony in a state of disorder. The people were dissatisfied, and demanded further privileges. Philadelphia was then suffering greatly from the ravages of yellow fever. The province he found, however, greatly improved. Penn granted a new "Frame of Government" to the people, conferring on them greater powers. The council was abolished, and the power of legislation vested in the governor, and an assembly chosen annually. Voters were required to have a freehold of fifty acres of land, or \$166 worth of personal property.

Nothing, however, would satisfy the people of the lower counties, now Delaware, but secession, or separation from Pennsylvania, which took place in 1708. The same governor, however, continued to preside over both, Delaware being separate only in legislation.

Penn, immediately after granting this last charter, returned (1701) to England, where a project had been started by the English ministers to suppress all the proprietary governments in America. It would be interesting to pursue the career of Penn in England; but

we must be brief. Penn died in England in 1718, leaving his interests in Pennsylvania and Delaware to his sons, John, Thomas, and Richard Penn, who managed the provinces, principally by deputies, down to the time of the American Revolution, at which time the commonwealth of Pennsylvania purchased all their claims in the province for about half a million of dollars.

At the time of the death of Penn, the population of Pennsylvania was increasing, from emigration, at the rate of five or six thousand annually. The principal product of the province was wheat, which was exported in considerable quantities to Spain, Portugal, and the West Indies. Lands then sold at \$45 per hundred acres, the proprietors always reserving for themselves, out of every purchase, a tenth part of the best lands, under the name of manors, as their private property. In 1741, Philadelphia contained 12,000 inhabitants.

Of the early commerce of Pennsylvania we know but little. The first trade was that carried on with the Indians in skins and furs, and the first product of the soil was tobacco, of which the province exported, in 1688-9, fourteen cargoes; but the competition of Maryland and Virginia caused the Pennsylvanians to abandon the cultivation of tobacco for that of wheat. The trade of the province was greatly injured by the war between England and France, continuing from 1688 to 1697. It caused much distress and poverty in the colony, in which money was so scarce, that in Philadelphia, it is said, "even pieces of tin and lead were current for small change."

From 1697 to 1776, the trade of Pennsylvania appears to have increased slowly. There was, however, in almost every year during this long period of seventy-nine years, a vast excess of imports over exports. During the wars between England, France, and Spain, the depredations of privateers almost entirely interrupted the foreign trade of the province; besides, when these depredations were absent, the trade suffered from heavy exactions made on all vessels entering the Delaware. The exports in 1697 amounted to \$3,347. We compile the following table, to give some idea of the progress of the trade of Pennsylvania from 1697 to 1774:

	Average Exports of Pennsylvania		Average Imports of Pennsylvania	
	£	£	£	£
1697 to 1707.....	1,477	to 5,220	2,997	to 18,529
1707 to 1717.....	38	to 5,193	5,881	to 22,505
1717 to 1727.....	4,057	to 12,823	15,932	to 42,249
1727 to 1737.....	7,434	to 21,949	29,799	to 61,513
1737 to 1747.....	7,446	to 17,158	11,918	to 91,010
1747 to 1757.....	3,832	to 38,527	75,330	to 245,644
1757 to 1767.....	14,190	to 39,70	168,426	to 707,998
1767 to 1774.....	23,111	to 69,611	134,861	to 728,744

During the period of 79 years, embraced in the above table, there were 29 years of war between England, France, and Spain,

together with an almost constant warfare carried on with the Indians of the western frontiers, which also embarrassed trade. From 1776 to 1783, Pennsylvania had but little or no foreign trade. It was then, however, not idle. Its citizens were among the foremost in the glorious struggle for independence, aiding it by their example, their money, and their personal services.

The first bank established in the United States was the Bank of Pennsylvania, opened at Philadelphia on the 17th of July, 1780, with a capital of £300,000—its special object being to supply the American army with provisions. This bank continued until the Bank of North America went into operation in 1782, which latter continued until the United States Bank commenced operations in 1791. Paper money, however, was first manufactured in Pennsylvania, in the year 1722, under Governor Keith. A "paper money loan system" was invented by him, and loan offices were established in every county. Bills to the amount of \$150,000 were issued in 1723. In 1730, the money was found to be so much depreciated, that further issues were suspended.

At the close of the Revolutionary War, in 1783, the trade of the colonies revived. Commercial relations were entered into with most of the European nations, and the resources of the country began a rapid development. The wars commenced by France, in 1792, with the other European powers, and which were continued till the abdication of Napoleon, in 1814, affected our commerce considerably. Our foreign trade flourished beyond all precedent, and large fortunes were made by hundreds of our citizens, in consequence. Pennsylvania shared largely in this prosperity. Large importations were made from China and India into Philadelphia for re-exportation to European markets. Our ships enjoyed the carrying trade of the world. The population of Philadelphia in 1790 was 42,000.

The following table shows the progress of the foreign trade of Pennsylvania, from 1791 to 1850:—

	Exports.	Imports.
1791.....	\$3,486,093	—
1792.....	3,820,662	—
1793.....	6,958,836	—
1794.....	6,643,092	—
1795.....	11,518,260	—
1796.....	17,513,866	—
1797.....	11,446,291	—
1798.....	8,915,463	—
1799.....	12,431,967	—
1800.....	11,949,679	—
1801.....	17,438,193	—
1802.....	12,677,475	—
1803.....	7,525,710	—
1804.....	11,030,167	—
1805.....	13,762,252	—

	Exports.	Imports.
1806.....	17,574,712	—
1807.....	16,864,744	—
1808.....	4,013,330	—
1809.....	9,049,241	—
1810.....	10,993,398	—
1811.....	9,560,117	—
1812.....	5,973,750	—
1813.....	3,577,117	—
1814.....	—	—
1815.....	4,593,919	—
1816.....	7,196,246	—
1817.....	8,785,592	—
1818.....	8,759,402	—
1819.....	6,293,788	—
1820.....	5,748,549	—
1821.....	7,391,767	8,158,922
1822.....	9,047,802	11,874,170
1823.....	9,617,192	13,696,770
1824.....	9,364,893	11,865,531
1825.....	11,269,981	15,041,797
1826.....	8,331,722	13,551,779
1827.....	7,575,893	11,212,935
1828.....	6,951,480	12,884,408
1829.....	4,089,935	10,100,152
1830.....	4,291,793	8,702,122
1831.....	5,513,713	12,124,083
1832.....	3,516,066	10,678,358
1833.....	4,078,951	10,451,250
1834.....	3,989,746	10,479,268
1835.....	3,739,275	12,389,937
1836.....	3,971,555	15,068,233
1837.....	3,841,599	11,680,111
1838.....	3,477,151	9,360,371
1839.....	5,299,415	15,050,715
1840.....	6,820,145	8,464,882
1841.....	5,152,501	10,346,698
1842.....	3,776,727	7,385,858
1843.....	2,071,945	2,760,630
1844.....	3,535,256	7,219,267
1845.....	3,574,363	8,159,227
1850.....	4,501,606	12,066,154
1851.....	[Not yet published.]	

We shall continue this paper under the heads of population, mineral resources, manufactures, commerce, internal improvements, banks, finances, judiciary, schools and colleges, &c., bringing each down to the present time.

Population.—The following table will show the progressive movement of the population of Pennsylvania, from 1790 to 1850:

Date of Census.	Total Population.	Decennial Increase.
1790.....	434,373	—
1800.....	602,365	167,992 88.6 per cent.
1810.....	810,091	207,726 34.4 “
1820.....	1,049,458	239,367 29.5 “
1830.....	1,348,233	298,775 28.4 “
1840.....	1,724,033	375,800 27.8 “
1850.....	2,314,897	590,864 34.2 “

The following is the population of the principal cities of Pennsylvania for 1850:

Philadelphia.....	408,815
Reading.....	15,748
Lancaster.....	12,369
Pittsburg.....	50,519
Alleghany.....	21,262

We omit all places whose population is less than 10,000. The area of Pennsylvania, in square miles, is 46,000, giving a population of 50.25 to the square mile.

Mineral Resources.—The mineral wealth of Pennsylvania is very great, consisting of an inexhaustible supply of coal, iron and salt. Its immense coal regions form its most interesting and important mineral feature. *Bituminous* coal, of an excellent quality, is found almost every where in the state, west of the Alleghany mountains, and in the south part of the state, east of the mountains. The *anthracite* coal region, with some few exceptions, is bounded on the northwest by the north branch of the Susquehanna, extending in a northeast direction over 60 miles, and divided into the southern, middle and northern coal-fields. The great deposits of anthracite coal, in Pennsylvania, have an area of about 975 square miles, or 624,000 acres. The deposits in some places are from 50 to 60 feet thick. The southern anthracite coal-basin of Pennsylvania is sixty miles long by two broad, with an aggregate thickness of 100 feet. Indeed, 30 out of the 54 counties of the state are, in whole or in part, based upon coal. The thickest coal deposits in England are only 30 feet thick.* The bituminous coal region of Pennsylvania has an area of 21,000 square miles, or 13,440,000 acres.

The coal mines of Pennsylvania are a source of inexhaustible wealth. They are more valuable than the gold mines of California; and if Pennsylvania had nothing else, her coal mines alone would make her rich. The working of these mines may be dated from 1820. The quantity dug and sent to market since that time amounts to 28,998,286 tons. The progress made in the working of these mines is shown by the following statement: There were dug,

In 1820.....	365 tons.
“ 1825.....	34,896 “
“ 1830.....	174,734 “
“ 1835.....	575,103 “
“ 1840.....	867,045 “
“ 1845.....	2,002,877 “
“ 1850.....	3,371,255 “

The business may be considered as still in its infancy. What will be the demand for coal from those mines, in 20 years from this

time, when it is probable that there will be at least 20 steam vessels consuming coal to one now! Last year, the coal taken from the mines of Pennsylvania was sold for \$16,000,000.

Next to coal stands iron among the mineral products of Pennsylvania. Pennsylvania now produces as much iron as did the whole of Great Britain in 1820, and during the last ten years the quantity of Pennsylvania iron has doubled. Pennsylvania now produces as much iron as France; more than Russia and Sweden united, and more than all Germany.* To have some idea of the abundance of iron in Pennsylvania we have only to consider the fact that, of the 62 counties of that state, 45 contain iron works, and the remaining 17 abound in iron and coal. It is estimated that Pennsylvania makes one half of all the iron produced in the United States. The total number of iron works of all kinds in the state is 504; the capital invested in lands, buildings and machinery, is \$20,502,076; the number of men employed, 30,103, and the number of horses, 13,582. The fuel used by all these works cost, in 1847, \$4,879,884. One and a half millions of cords of wood are consumed annually by these works, thus clearing of timber, 37,000 acres yearly, or 48 square miles. It is estimated that this does not exceed one fourth the ability of the state to furnish wood annually for ever.

As the subject of iron manufactures in Pennsylvania is at this present time a matter of much interest, the iron manufacturers of that state making complaint of a want of adequate protection from the general government, and ascribing all their failures to this cause alone, we give the following table, showing the number of iron works that have been built in the state since 1840, and the number that have failed since that date. It will show the progress of the iron manufacturing business in Pennsylvania during the last 10 years:

	Built.	Failed.
1840.....	135.....	6
1841.....	6.....	2
1842.....	20.....	20
1843.....	7.....	7
1844.....	21.....	11
1845.....	30.....	3
1846.....	53.....	4
1847.....	25.....	24
1848.....	17.....	37
1849.....	10.....	41
1850.....	7.....	23
1851.....	—.....	—

The amount of iron manufactured in Pennsylvania since 1847, is as follows:

1847.....	389,350 tons.
1849.....	253,370 "
1850.....	198,813 "
1851.....	150,000 "

From this, it appears that the manufacture has diminished more than 50 per cent. during the last three years.

Besides iron, there is in Pennsylvania an extensive copper and lead formation, recently discovered near the Schuylkill river, about twenty miles from Philadelphia. These mines have been successfully worked during the past year. The copper ore yields 20 per cent. of pure copper, and the lead ore, 75 per cent. of pure lead. With the lead ore, there is also found silver ore, yielding silver about \$35 to the ton. These mines of copper, silver and lead, are very promising.

Manufactures.—As the returns of the last U. S. census are not yet published in full, we cannot give a complete account of the manufactures of Pennsylvania. Mr. Kennedy, superintendent of the census, at Washington, has furnished only a general report of the facts relating to a few of the most important manufactures, from which we compile the following table, showing the present state of some of the more important manufactures of Pennsylvania:

MANUFACTURES OF PENNSYLVANIA, 1850.

	Capital invested.	Value of prod.	Hands employed.
Cotton goods	\$4,528,925	\$5,122,263	7,663
Woollen goods	3,003,064	5,321,866	5,726
Pig iron.....	4,570,425	7,071,513	9,294
Iron castings..	3,422,924	5,354,881	4,788

The principal manufacturing places of Pennsylvania are Pittsburg and Philadelphia. Of the first of these cities, we can give the state of manufactures at the present time with sufficient accuracy. There are in Pittsburg 13 rolling mills, employing 2,500 hands, and a capital of \$5,000,000. These mills consume 60,000 tons of pig metal, and produce bar iron and nails to the amount of \$4,000,000 annually. There are also thirty large foundries, and several smaller ones, employing 2,500 hands, and a capital of \$2,000,000. They consume 20,000 tons of pig metal, and yield articles amounting to \$2,000,000 annually. There are two establishments for manufacturing locks, latches, coffee-mills, scales, and other articles of iron, employing 500 hands, and a capital of \$250,000. These two establishments consume annually 1,200 tons of metal, converting it into goods worth \$3,000,000. Pittsburg also has five large cotton factories and several smaller ones, employing 1,500 hands—capital \$1,500,000, and producing products, out of 15,000 bales of cotton annually consumed, worth \$1,500,000.

There are also eight flint-glass manufactories in Pittsburg, employing five hundred

* See Memorial of Pennsylvania Iron Manufacturers to Congress, 1849.

hands, a capital of \$300,000, and producing, out of 150 tons of lead, and 200 tons of pearl-ashes, various articles of glassware, worth annually \$400,000. There are also seven phial furnaces, and 12 window-glass manufactories, employing 600 hands, a capital of \$250,000, and yielding products to the amount of \$600,000 annually. One soda-ash manufactory employs 75 men, and produces annually 1,500 tons. One copper-smelting establishment produces annually 600 tons of refined copper, worth \$250,000. One copper-rolling mill yields copper sheathing worth \$150,000 annually. Five white lead factories produce, annually, with a capital of \$150,000, 150,000 kegs of lead, worth \$200,000. There are also many factories of the smaller sizes of iron, and several establishments for the manufacture of axes, hatchets, spring steel, steel springs, axles, anvils, vises, saws of all kinds, gun barrels, shovels, spades, forks, hoes, tacks, brads, &c. &c.

It is estimated that the full value of all the manufactures of Pittsburg does not fall short of \$50,000,000.

Commerce.—The exports to foreign countries from Pennsylvania amounted, in 1850, to \$4,501,606, and the imports to \$12,066,154. In 1841, the exports amounted to \$5,152,501, and the imports to \$10,346,698. The amount of domestic produce exported in 1850 was \$4,049,464.

Internal Improvements.—Pennsylvania has 28 railroads, varying from 4 to 174 miles in length, and making in all a line of 918 miles. This does not include some that are yet incomplete. The entire cost of these roads was \$35,401,033.

The principal canal of Pennsylvania is the Pennsylvania Canal, the eastern branch of which extends from Columbia, on the Susquehanna, to Hollidaysburg, at the foot of the Alleghenies, a distance of 172 miles. This branch is connected by a railroad passing over the mountains with the western branch of the canal, extending from Johnstown to Pittsburg, 104 miles, making the whole length of the canal 276 miles. A canal extends from the Pennsylvania Canal, at the mouth of the Juniata, to Cumberland, 39 miles, where it connects with the North and West Branch canals. The West Branch Canal extends from Northumberland, along the west of the Susquehanna river, 75 miles, to Farrandsville, near the bituminous coal region. The North Branch division extends from Northumberland, 73 miles, to a little above Wilkesbarre. The Delaware division of the Pennsylvania Canal extends from tide-water at Bristol, twenty miles above Philadelphia, to Easton, at the mouth of the Lehigh, where it joins the navigation of the Lehigh company, extending to the coal region, 25 miles. The Schuylkill navigation commences at the Fairmount Dam,

near Philadelphia, and extends to Port Carbon, the heart of the coal region. There is also the Union Canal, which extends from the Schuylkill, near Reading, to Middletown, on the Susquehanna, 82 miles. It has a branch 28 miles long on Swatara Creek, which leads to the coal region. The Susquehanna, or Tide-water Canal, extends from Wrightsville, opposite Columbia, to Havre-de-Grace, in Maryland, a distance of 45 miles, connecting the Pennsylvania Canal with the tide-water of Chesapeake Bay.

Banks.—The first experiment of paper currency made in Pennsylvania was in 1722, when the province issued bills to the amount of £15,000. No loans were made but on land security, or plate deposited in the loan office. Borrowers were obliged to pay five per cent.; and the bills of the province were made a legal tender in all payments, *on pain of confiscating* the debt, or forfeiting the commodity. Penalties were also imposed on all persons who presumed to make any bargain or sale on cheaper terms, in case of being paid in gold or silver. One eighth of the public debts thus created was to be annually paid. We do not propose to give the history of banking in Pennsylvania, but merely to state the present condition in general terms of the banks of the state. Banking, like everything else, has progressed rapidly in Pennsylvania. It had in November, 1850, no less than 54 banking institutions, or one for each county in the state. These 54 banks have a capital of \$19,125,477, and a circulation of \$12,072,888. The tax paid on dividends in 1850 amounted to \$153,877, and the tax on corporation stocks to \$70,008. Banking operations in Pennsylvania have not fluctuated much since 1842, in which year also the banking capital was \$19,127,677. Last year, applications were made to the Legislature of Pennsylvania for an increase of capital to the amount of \$4,900,000, which includes some new banks.

BANKS IN PENNSYLVANIA IN JANUARY, 1852.

Banks.	Capital.
Philadelphia,.....15	\$10,518,600
Bristol,.....1	92,220
Brownsville,.....1	175,000
Carlisle,.....1	22,500
Chambersburg,.....1	205,470
Chester,.....1	155,640
Columbia,.....1	307,300
Danville,.....1	165,770
Doylestown,.....1	60,000
Easton,.....2	550,000
Erie,.....1	101,890
Germantown,.....1	152,000
Gettysburg,.....1	123,873
Hanover,.....1	36,000
Harrisburg,.....2	350,000
Honesdale,.....1	100,000
Lancaster,.....4	955,000

Banks.	Capital.
Lebanon,..... 1	80,820
Middletown,..... 1	100,000
Norristown,..... 1	884,000
Northumberland,.... 1	160,000
Pittsburg,..... 4	2,618,543
Pottsville,..... 1	199,120
Reading,..... 1	300,000
Schuylkill Haven,.... 1	100,000
Washington,..... 1	120,000
Waynesburg,..... 1	100,000
Westchester,..... 1	225,000
Wilkesbarre,..... 1	85,330
Williamport,..... 1	100,000
York,..... 2	320,000

Total, 54 banks, with \$18,966,351 capital. New-York, with less than one third more of population, has 218 banks, with \$58,497,345 capital; Massachusetts, with half the population, 137 banks, and \$43,350,000 capital. We are indebted to the Bankers' Magazine for the figures.

Finances.—According to a report made to the Legislature of Pennsylvania, by the Auditor-General, in January, 1851, the total public debt of the state was then \$40,677,214 68. Of this debt, all of which is funded but \$912,570, there are \$200,000 bearing 4½ per cent interest; \$38,009,817 bearing 5 per cent; and \$2,387,396 bearing 6 per cent interest.

The productive property owned by the state is as follows:

Stock in incorporated companies, \$1,907,948
 Pennsylvania railroads and canals, 29,204,787

Total productive property, \$31,112,735

The total amount of interest paid by the state annually on its liabilities, is about \$2,204,700.

The total receipts of the state, from all sources and available means, in 1850, were \$5,634,338; and the total expenditures for the same year, \$4,569,053.

Some of the principal items of expenditure of the state in 1850 were as follows: public improvements, \$1,488,799; expenses of government, \$272,899; common schools, \$213,728; interest, \$2,004,700; charitable institutions, \$62,267; pensions and gratuities, \$17,277; military expenses, \$16,282; commissioners of sinking fund, \$318,864; penitentiaries, \$19,283; damages on public works, \$28,068.

Some of the chief sources of income were: Tax on real and personal estate, \$1,317,821; canal and railroad tolls, \$1,713,848; tax on bank dividends and corporation stocks, \$300,000; retailers' licenses, \$171,062; tavern licenses, \$107,427; auction duties, \$44,898; tax on writs, wills, deeds, &c., \$45,409; auction commissions, \$18,673; tax on certain offices, \$14,047; military fines, \$12,952; bro-

kers' licenses, \$10,228; other licenses, \$21,323; collateral inherent tax, \$102,295; loans, \$270,000.

Judiciary.—By the amended constitution now in force, all judges in Pennsylvania are elected by the people. The judges of the Supreme Court are chosen at large for a term of fifteen years; and the judges of the several courts of Common Pleas and other courts of record, and all other judges, are elected by the electors of the districts over which they preside, for a term of ten years. The associate justices of the Common Pleas hold office five years. All judges are liable to removal for lack of good behavior; and the governor, with two thirds of each branch of the legislature, can remove a judge for reasonable cause, short of sufficient grounds for impeachment.

The salary of a judge of the Supreme Court is \$1,600; that of a judge of the District Courts, \$2,000; and of the Courts of Common Pleas, from \$1,600 to \$2,600.

There are four District Courts, invested with the civil jurisdiction of the Common Pleas in all cases exceeding a certain amount.

Schools and Colleges.—The common school system in Pennsylvania is complete. The following are the statistics for 1850:

Whole number of common schools in the state,.....	8,844
Average number of months of teaching,.....	5.1
Number of teachers, male and female,.....	11,241
Average wages, per month, of male teachers,.....	\$17 20
Average wages, per month, of female teachers,.....	\$10 15
Number of male scholars,.....	242,621
Number of female scholars,.....	189,181
Number learning German,.....	11,041
Cost of teaching each scholar, per month,.....	\$1 44
Amount of school tax levied,.....	\$795,401
State appropriation,.....	\$159,367
Entire expense of schools, including instruction, school-houses, repairs, fuel, and contingencies,.....	\$926,447
Regular annual state appropriation,.....	\$200,000

Colleges, high-schools, and academies, in Pennsylvania, are numerous. The University of Pennsylvania was founded in Philadelphia, in 1755. Its foundation may be said to have been laid by Dr. Franklin, in 1742, who about that time projected an academy and free school, which became presently a college, and finally the University of Pennsylvania, which at present has 7 professors, but only 88 students. Its president is John Ludlow, D.D. Dickinson College, at Carlisle, was founded in

1783: it has 8 professors and 179 students; president, Jesse T. Peck, D.D. Jefferson College, at Canonsburg, was founded in 1802: it has 8 professors and 197 students; president, A. B. Brown D.D. Washington College, at Washington, in the western part of the state, was founded in 1806: it has 8 professors and 189 students; president, James Clark, D.D. Alleghany College is at Meadville: it was established in 1817, and has 7 professors and 106 students; president, J. Barker, D.D. Pennsylvania College is at Gettysburg, and has 7 professors and 64 students; founded in 1832; president, H. L. Baugher. Lafayette College, at Easton, was established in 1832, and has 7 professors and 82 students; president, Geo. Junkin, D.D. Marshall College, at Mercersburg, was founded in 1835, and has 6 professors and 58 students; president, J. W. Nevin, D.D.

Pennsylvania has, we believe, but one law-school, that of Dickinson College. It has seven theological seminaries, of different Protestant denominations. It has four medical schools, all in Philadelphia. The oldest of these is the Medical Department of the University of Pennsylvania, the oldest medical school in America. It was founded by the efforts of Drs. Shippen and Morgan, two eminent physicians in Philadelphia, before the Revolution. It has 7 professors and 450 students. It graduated, since its commencement, 5,316 students. Jefferson Medical College, founded in 1824, has 7 professors, 514 students, and has 2,036 graduates. The Medical Department of Pennsylvania College was founded in 1838. It has 7 professors, 176 students, and 73 graduates. The Philadelphia College of Medicine has 7 professors, 75 students, and 250 graduates.

We regret that we have not more ample statistics to offer on the subject of education in Pennsylvania, and on other subjects. The complete returns of the last United States census are yet unpublished. In 1840, there were, in a population of 1,724,033 persons, 33,940 white persons, over 20 years of age, who could neither read nor write. The figures of the census of 1850 will probably show a more favorable result.

Agricultural Products.—Pennsylvania ranks fourth in the Union in respect to the extent of her improved land; New-York having 12,285,077 acres of improved land; Virginia, 10,150,106; Ohio, 9,780,650; and Pennsylvania, 8,619,631 acres. Georgia ranks next. The large extent of mountain lands in Pennsylvania restricts very much her agricultural area. Some portions of the state, particularly the northern and western, are very thinly inhabited, although the lands are good. Pennsylvania, however, occupies no mean position in respect to agriculture, when comparing the value of her farming implements and machinery with those of other states. Those

of New-York are estimated at \$22,217,563; Pennsylvania, \$14,931,093; Ohio, \$12,716,153; Louisiana, \$11,326,310; Virginia, \$7,021,658. The value of the live stock of Pennsylvania is \$12,146,711; the state in this respect being in advance of all others, except New-York and Ohio. **Wheat**—Pennsylvania produces more wheat than any other state of the Union; its yield, in 1850, being 15,483,191 bushels. Ohio produced 14,967,056; Virginia, 14,516,950; and New-York, 13,073,357 bushels. **Indian Corn**—Pennsylvania produced, in 1850, more than New-York, by about 2,000,000 bushels; but not more than one third as much as Ohio, Kentucky, Illinois, Indiana, Tennessee, and Missouri, the six greatest Indian corn-growing states. The amount for Pennsylvania is 19,707,702 bushels. **Tobacco**.—Pennsylvania produced, in 1850, 857,619 lbs. **Wool**—4,784,367 lbs. **Wine**—23,839 gallons. **Butter**—40,554,741 lbs. **Cheese**—2,395,279 lbs. **Hay**—1,826,265 tons. **Flaxseed**—43,627 bushels. **Maple Sugar**—2,218,644 lbs. These figures are derived from the census of 1850.

PHILADELPHIA.—COMMERCE.—The following statement shows the value of the imports annually into the port of Philadelphia, and the duties accruing to the United States, from 1830 to 1851, inclusive. They have been carefully prepared from official documents:

Years.	Value of Imports.	Duties.
1830.....	\$9,525,893	\$3,537,516 10
1831.....	11,673,755	4,372,525 98
1832.....	10,048,195	3,500,292 50
1833.....	11,153,757	2,985,095 50
1834.....	10,686,078	2,110,477 32
1835.....	11,868,529	2,501,621 43
1836.....	16,116,625	3,146,458 43
1837.....	10,130,838	1,820,993 21
1838.....	10,417,815	2,109,955 30
1839.....	14,753,589	2,884,984 16
1840.....	8,624,484	1,517,206 70
1841.....	9,948,598	1,983,881 64
1842.....	6,201,177	1,812,842 82
1843.....	4,916,535	1,437,837 84
1844.....	8,310,865	2,981,573 15
1845.....	7,491,497	2,370,515 71
1846.....	8,308,615	2,608,068 16
1847.....	12,153,937	2,904,748 97
1848.....	10,700,865	2,767,459 13
1849.....	10,160,479	2,694,245 34
1850.....	13,381,759	3,412,239 68
1851.....	12,795,440	3,673,123 80

The following is an official statement of the amount and value of the exports from Philadelphia to foreign ports during the year ending the 30th September last:

Flour, barrels.....	304,812	\$1,393,587
Rye Flour, barrels....	13,341	45,292
Corn Meal, barrels....	71,883	210,004

Bread, barrels.....	19,179 }	
" kegs.....	11,933 }	68,174
Wheat, bushels.....	842,221	869,826
Corn, bushels.....	609,176	892,490
Other Grain, bushels...	—	86,246
Bark, hhds.....	5,591	129,907
Cotton, bales.....	2,072	113,968
Coal, tons.....	13,827	55,802
Dried Fish, cwt.....	3,267	8,678
Pickled Fish, barrels...	1,243	5,588
Sperm Oil, gallons....	12,989	16,486
Whale Oil, gallons....	182,802	69,732
Sperm Candles, lbs....	45,076	15,423
Manufactures of Wool.	—	162,036
Tar and Pitch, barrels.	1,612 }	
Rosin, barrels.....	14,040 }	25,271
Beef, barrels.....	7,442 }	
Tallow, lbs.....	587,002 }	136,061
Pork, barrels.....	6,887 }	
Hams, lbs.....	677,650 }	436,611
Lard, lbs.....	3,268,090 }	
Butter, lbs.....	5,770,973 }	
Cheese, lbs.....	168,044 }	76,794
Potatoes, bushels.....	3,834	2,723
Apples, barrels.....	250	786
Rice, tierces.....	3,874	72,098
Tobacco, leaf, hhds....	621	73,152
Beer, gallons.....	10,431 }	8,250
Porter and Cider, doz..	3,373 }	
Candles, lbs.....	788,021 }	138,548
Soap, lbs.....	883,992 }	
Iron Manufactures.....	—	216,750
Drugs.....	—	49,778
Domestic, pkgs.....	4,539	247,113
Books.....	—	4,107
Paper.....	—	12,119
Paints.....	—	2,641
Vinegar, gallons.....	35,460	8,676
Furniture.....	—	20,942
Tobacco, manufac., lbs.	218,166	38,142
Gunpowder, lbs.....	97,300	13,021
Nails, lbs.....	413,624	13,742

EXPORTS BREADSTUFFS FROM PHILADELPHIA, FROM 1831 TO 1852.

We have prepared the following table, showing the exports of wheat and rye flour, corn meal, wheat and corn, from this port annually, for the last twenty years:

Wheat Flour.

1831.....bbls.	259,785	1842.....bbls.	161,866
1832.....	151,917	1843.....	128,517
1833.....	132,622	1844.....	196,433
1834.....	87,905	1845.....	201,956
1835.....	96,098	1846.....	366,610
1836.....	67,113	1847.....	420,684
1837.....	33,680	1848.....	179,507
1838.....	69,632	1849.....	220,766
1839.....	191,380	1850.....	63,024
1840.....	284,774	1851.....	299,466
1841.....	195,555		

Rye Flour.

1831.....bbls.	8,433	1842.....bbls.	22,530
1832.....	13,040	1843.....	22,303
1833.....	27,939	1844.....	21,904

1834.....	23,795	1845.....	17,066
1835.....	21,038	1846.....	19,730
1836.....	27,429	1847.....	20,407
1837.....	17,376	1848.....	15,537
1838.....	14,211	1849.....	26,536
1839.....	24,527	1850.....	25,054
1840.....	36,471	1851.....	10,506
1841.....	26,866		

Corn Meal.

1831.....bbls.	45,432	1842.....bbls.	97,884
1832.....	50,328	1843.....	106,484
1833.....	51,903	1844.....	101,356
1834.....	50,018	1845.....	115,101
1835.....	50,860	1846.....	144,857
1836.....	42,796	1847.....	300,531
1837.....	63,803	1848.....	140,014
1838.....	64,002	1849.....	91,319
1839.....	73,800	1850.....	94,334
1840.....	89,496	1851.....	65,385
1841.....	108,822		

Wheat.

1831.....bush.	61,982	1844.....bush.	23,375
1832.....	2,258	1845.....	86,069
1833.....	2,903	1846.....	245,136
1839.....	37,831	1847.....	523,688
1840.....	280,047	1848.....	207,062
1841.....	57,953	1849.....	177,312
1842.....	86,531	1850.....	206,670
1843.....	32,335	1851.....	225,901

Corn.

1831.....bush.	42,293	1842.....bush.	83,772
1832.....	48,859	1843.....	74,613
1833.....	66,708	1844.....	110,068
1834.....	31,526	1845.....	129,246
1835.....	25,457	1846.....	279,820
1836.....	19,117	1847.....	1,102,210
1837.....	21,486	1848.....	817,150
1838.....	17,087	1849.....	906,822
1839.....	17,117	1850.....	602,680
1840.....	76,749	1851.....	554,545
1841.....	89,966		

ANNUAL ARRIVALS AT PHILADELPHIA.

The following table shows the number of vessels which arrived at this port annually from 1835 to 1851, inclusive. It will be that the increase has been very rapid of late years:

Years.	Foreign.	Coastwise.	Total
1835.....	429	3,573	4,002
1836.....	421	3,764	4,185
1837.....	409	7,476	8,185
1838.....	464	10,860	11,344
1839.....	521	11,188	11,709
1840.....	456	9,706	10,162
1841.....	504	9,246	9,750
1842.....	454	7,973	8,427
1843.....	372	7,659	8,031
1844.....	472	7,717	8,189
1845.....	387	8,029	8,416
1846.....	459	6,018	6,477
1847.....	657	18,069	18,726
1848.....	542	23,921	24,463
1849.....	585	24,594	25,169
1850.....	518	27,035	27,553
1851.....	576	26,484	27,060

PITTSBURG.—With its dependencies of

Birmingham, Sligo, Alleghany City, and the like, which lie across the Monongahela and Alleghany rivers, the population of Pittsburgh is said to range between 60,000 and 80,000. The iron works are more extensive, perhaps, than those of any other city in the Union. There are eleven rolling mills in and about Pittsburgh, of which eight are capable of producing 4,000 tons each of manufactured iron, annually, and employ about 150 hands to the mill. This iron is of a superior quality, and is used for boilers, axles, wire, sheets, and the like. The pig metal is supplied principally from the charcoal furnaces along the river. Something like 75,000 tons of pig metal is consumed a year, between the mills and foundries. The manufacture of glass is carried on extensively. Besides fourteen establishments, the work of which is known as country glass, there are seven flint glass factories in the vicinity, six for window glass, five for green glass, and one for black glass. These employ twenty-five or thirty men each, and more than a million of dollars is invested. Nail factories are also numerous, and upon a large scale. One has a capacity of 2,000 kegs per week, and others are nearly equal to it. The demand is greater than the supply, and the orders extend from Buffalo to New-Orleans. It is estimated that sixty steamers will be built at Pittsburgh the present year.

The trade with the lakes has doubled itself every year since 1844, owing to the facilities of communicating through the two great avenues to Erie and to Cleveland.

Table of some of the principal articles of exports and imports, via canal, in 1846 and 1847.

EXPORTS.		
	1847.	1846.
Cotton, lbs.....	1,056,138	1,000,971
Hemp.....	3,811,618	1,287,886
Tobacco, leaf.....	14,777,059	24,696,742
Groceries.....	1,978,822	1,671,889
Hardware, cutlery..	246,887	239,353
Iron, pigs.....	65,537	2,675,341
" castings.....	250,910	
" blooms.....	13,836	
" cast steel.....	549,416	
Lead.....	188,078	325,085
Nails and spikes...	51,760	82,732
Bacon.....	12,713,427	21,661,236
Beef, pork.....	41,225	19,620
Butter.....	747,645	800,265
Flour, barrels.....	297,940	156,412
Lard, lard oil, lbs..	5,319,378	2,929,286
Tallow.....	62,946	291,313

IMPORTS.		
	1847.	1846.
<i>Agricultural.</i>		
Not specified, lbs. ...	1,257,620	871,500
Oats, bushels.....	21,360	19,080
Leather, lbs.....	312,239	386,225

Coffee, lbs.....	9,927,605	10,920,993
Dry goods, lbs.....	23,201,074	12,651,818
Groceries.....	7,833,925	6,923,856
Hardware and cut-	14,501,693	10,522,463
lery, lbs.....		
Coffee, lbs.....	884,966	429,139
Iron, pig, lbs.....	21,979,853	15,410,661
" castings.....	124,662	
" blooms.....	14,942,390	
" bar and sheet..	4,397,268	2,833,879
Nails and spikes....	15,886,711	575,402
Fish, lbs.....	5,977,891 brls	19,600

Statement, showing the number and extent of the Cotton Factories of Pittsburgh.

Companies.	Bales.	Number of Spindles.	Weight of Yarn of Cotton daily.	Weight daily.	Yards of Cloth per annum.	Number of Hands.	Looms.	Product.
Hope.....	3,100	6,500	4,000	....	....	275	....	\$216,000
Eagle.....	3,000	5,700	3,800	....	....	250	....	205,200
Union.....	1,600	4,500	1,500	500	....	300	40	116,500
Pittsburg.....	1,600	5,300	2,000	1,620,000	....	200	150	138,000
Penn.....	2,400	6,200	3,000	2,410,000	....	260	210	207,000
Starr.....	800	2,500	....	900	729,000	80	75	62,100
Gray &.....	400	1,200	500	....	....	40	....	27,000
	12,900	31,900	9,800	6,400	4,759,000	1,305	475	\$971,800

In addition to her numerous establishments, Pittsburgh has some twenty to twenty-five foundries in successful operation, in the manufacture of cannon, cotton presses, sugar mills, ploughs, and the like.

PITTSBURG INDUSTRY.—Thirteen rolling mills. Capital \$5,000,000—2,500 hands. Consume 80,000 tons of pig metal, and produce bar iron and nails amounting to \$4,000,000 annually.

Thirty large foundries, with several smaller ones. Capital in all \$2,000,000—2,500 hands. Consume 20,000 tons pig metal, and yield annual articles amounting to \$2,000,000.

Two establishments for manufacturing

locks, latches, coffee mills, scales, and other iron castings. Capital \$250,000—employing 500 hands. Consume 1,200 tons metal, producing goods amounting to \$300,000 annually.

Five large cotton factories and several smaller ones. Capital \$1,500,000—1,500 hands. Consume 15,000 bales of cotton, and return yarns, sheeting, batting, &c., to upwards of \$1,500,000.

Eight flint glass manufactories. Capital \$300,000—500 hands. Consuming 150 tons of lead and 200 tons pearlash; and producing various articles of glassware, amounting to \$400,000 annually.

Seven vial furnaces and eleven window glass manufactories. Capital \$250,000, employing 600 hands, and producing \$600,000 annually.

One soda ash manufactory, producing 1,500 tons annually—75 hands.

One copper smelting establishment, producing 600 tons refined copper annually, valued at \$380 per ton, and amounting to \$250,000.

One copper rolling mill in operation, producing 300 tons sheeting and brazier's copper, amounting to \$150,000 annually.

Five white lead factories. Capital \$150,000. Produce 150,000 kegs annually, worth \$200,000—employing 60 hands.

There are also a number of manufactories of the smaller sizes of iron, several extensive manufactories of axes, hatchets, &c., and spring steel, steel springs, axes, anvils, vises, mill, cross-cut, and other saws, gun barrels, shovels, spades, forks, hoes, cut tacks, brads, &c. After careful investigation, the full value does not fall short of \$50,000,000 annually. There is also consumed about 12,000,000 bushels of coal per year, worth \$600,000, and an equal number of bushels exported to markets near the city, giving employment constantly to 4,000 hands.

Pittsburg, with iron ore and coal at her door in inexhaustible quantities, a population of nearly 100,000, and with the Ohio—now yielding her over 500,000 tons per annum—commencing at her feet, and navigable for 1000 miles, (where she empties into the 'father of waters,' which then runs on till it ceases in the gulf of Mexico,) what is to prevent her from becoming a powerful, populous, and wealthy city?

The number of steamboats constructed at Pittsburg has been, on an average, about one in each week, for a series of years. These are floating palaces, the admiration of every one. Thirty or forty of them may be seen at the wharf at any one time, destined for various ports on the Ohio and Mississippi or Missouri rivers. If to this be added her manufacturing power and interest, as above, all must concede the importance of her trade and that of the valleys of the Ohio and the Mississippi.

PLANK-ROADS.—By WM. GREGG, S. C.
—A charter of incorporation for a company to build a plank-road from Charleston to the Mountains was obtained from the Legislature of South Carolina at its last session, by a company of gentlemen of Edgefield, together with a few individuals of this city. The plan is to commence at Charleston, and proceed to the vicinity of Abbeville Court-House, taking the direction of the South Carolina Railroad, and crossing the Edisto between Branchville and Orangeburgh; there striking the dividing ridge between the two Edistos, which leads without crossing water to the ridge which divides the waters of the Savannah and Saluda. There is probably no location in the United States which will afford easier average grades. They may certainly be reduced to one foot in fifty both ways as far as Abbeville, and beyond that to Pendleton, one in thirty.

In the list of great improvements which characterize the present age of progress, and which have aided so materially in widely diffusing the comforts of human life, the plank-road is destined to occupy a prominent place. Good common roads tend to change the condition of the planter or farmer, wherever they are extended.

The plank-road gives him a thoroughfare infinitely superior to any other, not excepting railroads. The superiority consists in its peculiar adaptation to the wants of a people, who necessarily maintain a large number of mules and horses, which are fed and kept in idleness, at a season of the year when crops are sent to market; a motive power which would carry a crop to market on a plank-road without cost, except for tolls. The travelling community, too, will, by the same means, move without being subjected to the rules and regulations of others, as to time, speed, or equipage, in which they desire to travel. The cheapness and facility with which plank-roads may be constructed in our state, need only to be made known to produce a change which will, in after years, annihilate one of the greatest evils known to our country—the mud and mire through which our bulky and valuable products are yearly dragged to market. In many parts of our country this is a source of involuntary hermitage, for a day's journey is not attainable, except through roads which seem to have concentrated all the evils that could embarrass a traveller. Plank-roads, by penetrating our forests, will find material for their construction, and afterwards afford the means of carrying them into portions of our state where the timber has been exhausted. They will be the means of redeeming and settling lands hitherto considered useless. When introduced, they will so expedite travel, as to bring a large range of our surrounding country so near to us as to be, as it were, the environs of our city. The plank-road is the

road of the people, open to all, affording relief to the beast of burden, multiplying and cheapening the means of carrying produce to market, and affording a delightful means of travel. We can trace back their origin to Russia, but are unable to fix a date. They were introduced into Canada in 1834, in our northern states in 1846, recently in Georgia, and other southern and western states. They have superseded Macadamized roads, and in some instances have held successful competition side by side with railroads. Even in countries where stone is abundant, and wood comparatively scarce, they are one half cheaper than Macadamized roads, and one fourth of the cost of railroads; and when constantly used by heavy burthen wagons so as to wear them out before they rot, they are more durable than Macadamized roads, including the outlay necessary to relay the plank-road once in seven years. A horse or mule will draw twice the weight on a plank-road that he could on a Macadamized one, travel with greater speed, more ease to himself, and less wear to the vehicle which he draws. The state of New-York, the first to introduce them, in the course of five years, has extended this species of improvement to over a thousand miles, which she has now already completed, and in daily use.

In the whole history of internal improvements, there is scarcely any thing to surpass the rapidity with which this system has developed itself. Plank-roads by the side of railroads are in use in New-York, and paying 10 to 15 per cent., carrying passengers at two cents per mile.

While we see other states progressing in this practical way, we, in South Carolina, are in the midst of a railroad mania. We seem to have passed by, unnoticed, the fact that, notwithstanding eighteen years have elapsed since the South Carolina Railroad to Hamburg was put in operation, the country through which it passes remains a comparative wilderness, with its hundreds and thousands of acres of heavy timber untouched, except the small portion used by the railroad for its construction and repairs. A plank-road would have long since carried this timber to market, and converted the present wild lands into cultivated fields.

It is the received opinion all over the world, that the improved condition of the common roads and bridges of a country are evident signs of the progress of civilization. But our planting states seem to be an exception to the rule; for, with all our wealth and refinement, our market-roads, over which millions of dollars worth of agricultural products annually pass, have had but little more labor bestowed upon them than to clear away the forest timber, and erect the rudest temporary bridges. In the winter season, when our great staple, cotton, ought to be carried to

market, they are frequently almost impassable, even for empty wagons.

In looking back into the history of the last thirty years in South Carolina, we find that, notwithstanding this unpardonable state of things, the public mind has occasionally been excited, and I may say convulsed, on this subject. The mania for internal improvements, which prevailed in 1820 in this state, can be characterized by no more appropriate term than convulsion, for in a state of feverish excitement, she expended millions of dollars in works for which the country was not prepared, and which proved to be a waste of money. The amount of capital expended in those useless canals would have constructed Macadamized roads to every important section of our state, serving, at that period, to cheapen the transit of produce to market, and at this time as a basis for the plank-road, so admirably adapted to our country, and which, in my opinion, is destined to supersede all other modes of transit.

Railroads are expensive in their first outlay, and extremely complicated, and expensive to keep up. They seldom improve the country through which they pass, and are beneficial to cities only, by reaching sections of country which have no natural outlets, and which are beyond the reach of a wagon trade, over good common roads. They are profitable to stockholders only when located on great thoroughfares for travel, and where they can be used to extend the commerce of a city. Out of the 9,000 miles of railroad now in use in the United States, it is surprising to learn how few of them yield a profit commensurate to the capital which has been invested in their construction. It certainly ought to admonish us against injudicious selections of the mode of improving the highways of the state, and of the fatal consequences of exhausting the energy and capital of a country to construct works, which, however gigantic in their conception, will not prove sufficiently useful to pay for keeping them up. I allude to the present state of public sentiment from no unkind feeling towards the railroads now being projected and in progress in our state, but from a settled conviction that public opinion, in this particular, is entirely in error.

Railroads are necessarily costly works, and ought not to be attempted except by capitalists for *bona fide* investment. When there is not a sure prospect of profitable returns, capitalists will not lend their aid, and the work has to be commenced by exciting appeals to patriotism, and plausible arguments as to the advantages which will accrue to every individual through whose neighborhood it may pass. The work is often commenced after receiving promises for but half the capital necessary to complete it, depending on loans for the balance; and when completed, is found to have cost more than the estimates, thus

starting under the disadvantage of a heavy debt. Then comes the great difficulty, which is the pith of the argument in favor of other modes of improving the highways of South Carolina,—I mean the large outlays necessary for the purchase of complicated machinery, the erection of workshops to keep it in repair, the necessity for high-salaried officers—such as a president, treasurer, auditor, agent of transportation, civil engineer, and foreman of workshops; also skilful workers in iron and wood—painters, upholsterers, receivers and deliverers of freight—laborers to load and unload—a regiment of clerks and book-keepers, working engineers, conductors, firemen, &c. To all of these ramifications of expense, the extent of which is scarcely conceivable by the best informed in such matters, must be added the wear of iron and decay of timber, slow but sure, in their eventual destruction of property, and which cannot be neglected even for a day. Much diversity of opinion exists among railroad managers as to the extent which railroad companies should engage in the manufacture and repair of machinery; in my opinion, large sums of money have been wasted in this way, and the extent of such establishments ought to be decided by the facilities immediately at hand to have the work done by private contract. All interior roads would be under the actual necessity of doing such work for themselves, however costly it might prove to be. The workshops now being erected by the South Carolina Railroad Company in this place are on an extensive scale. Without pretending to enter into any argument as to the policy, I do not hesitate to express the opinion, that when this establishment is fully equipped with men and machinery, that, in the absence of the most consummate skill in managing, it will sink, in the wear and tear of machinery, waste of material, and injudicious application of mechanical labor, a larger sum per annum than would be necessary to pay a good dividend on the investment necessary to build a plank-road one hundred and sixty miles long. The mere working of the South Carolina Railroad costs, in round numbers, over \$1,200 per day for every working day in the year. As I have before observed, railroads are exceedingly complicated works, costly in their construction and outfit, and in their management; and we think that the least reflection ought to convince us that they are only fitted for locations where they can obtain the patronage of an extensive mercantile or manufacturing population.

How striking the contrast between rail and plank-roads in every point of view. The permanent cost of a plank-road ceases with the construction of the highway. With the same original expenditure, it accommodates a thousand or a million tons of transportation; while the railroad requires large investments in

machinery for any additional influx of trade, whether permanent or temporary. The plank-road is capable of meeting all the wants of our country, and superior to the railroad in every particular, but that of indulging our fancy in rapidly passing from one point to another; it is so simple and cheap in its construction and management, that there is scarcely a village or an agricultural section of our country that cannot afford to build and maintain one.

After the construction is completed, the commonest labor of our country can be used in keeping them in repair. The whole expense of conducting the affairs of a plank-road from this city to the mountains would be embraced in the salary of a treasurer or general supervisor, the gate-keepers, overseers and laborers requisite to keep the road in order. The most striking feature of the plank-road system, that distinguishes it from the railroad, is, that the first avails itself of the independent, pre-existing animal power for the purpose of transportation, while the last substitutes mechanical agency for the same end.

Now, if the question were raised in manufacturing countries, like Great Britain and the eastern states, (where the construction and management of machinery is the business of a large class of the population, and where horse power is used only to a limited extent,) as to the advantages of the two modes of transportation, the decision would undoubtedly be in favor of the machine; but in South Carolina we are seeking the best modes of transportation for our great agricultural staple, and it is a question of some importance how far the public interest will be promoted by substituting machinery, when it would not lessen the amount of animal power required for the purposes of production. From the great amount of ploughing necessary to the growth of a cotton crop, there is no country in the world which employs so much of animal power, in proportion to the weight of the staple product, as in our cotton growing states. In the growth of cotton, ploughing is continually needed from January and February, when the land is broken up, to August, when the crop is laid by, and the fruit begins to open; on an average, a horse or mule is employed for every eight bales of cotton, or ton and a half of product. In grain and grass growing countries, a farmer puts in thirty acres of wheat with one horse, which yields from fifteen to twenty bushels to the acre, or 36,000 lbs., about fifteen tons of product to the horse. The article of hay will greatly exceed this, and probably reach forty tons of product to the horse.

In hilly countries, plank-roads are more necessary and advantageous than in flat ones and it is not at all necessary to procure so low a grade as one in fifty; one in sixteen is in very common use, and one in ten may be used to great advantage. If the hill-sides only of the upper districts were planked, it would ef-

fect a saving, afford great relief, and prove more economical in the end, than the usual repairs bestowed upon them. Many persons suppose, that in our sandy country a double track will be required. In a few instances, where the sand is very light, it may be, but this is a rare occurrence. King and Meeting streets were beds of loose sand previous to planking the sides of these thoroughfares, but now, since the heavy wagons are confined to the plank-road, the middle portions of the streets have become so solid as to make a good surface for fast driving, and to admit of a heavily loaded wagon passing off and on the plank-road, with little or no inconvenience.

For the various as well as most approved modes of building plank-roads, reference should be made to Gislispie's Manual of the principles and practice of road building. He gives eight feet as the most approved width, and requires 160,000 feet of lumber to a mile. The cost is variously estimated at from \$1,000 to \$2,400 a mile. The grading in hilly countries constitutes a heavy item. A road from Charleston to Abbeville would be about 160 miles long. The grading would necessarily be light, and with lumber at \$6, it could be completed, with a track nine feet wide, for \$1,700, at the outside \$1,800, a mile, which cost will include engineering, gate, houses, &c. From my experience in such matters, I am satisfied that, by the aid of steam saw mills, a contractor could lay down his timber on the line, for the first 150 miles, at \$4 50 per 1,000 feet.

With persons who have not reflected on the subject, the first objection which seems to urge itself against plank-roads, compared with railroads, is the immense amount of lumber required in their construction. This objection is easily met by the fact, that they do not require more timber than is used in the construction of a railroad, while the durability of the timber for use is twice as great in a plank as in a railroad. The material for the former will remain and do service as long as a wagon wheel will pass smoothly over it, while, on the latter, the safety of rapidly moving and heavy machinery requires that the timber should be removed on the first symptom of decay. The average durability of plank-roads is from nine to ten years; and if the air is excluded from the sills, they will last from fifteen to twenty years.

Others, again, may urge that plank-roads could not thrive or be supported in the vicinity of the railroad. We refer such persons to the fact, that there are now upwards of 5,000 wagons per annum, that pass the Six-Mile House, coming to Charleston; that cotton and other produce is hauled sixty miles to town in wagons, and sometimes from Blackville, ninety miles. On a good plank-road, a single mule will haul a cord of wood thirty miles in a day; and a team of four mules will bring to town 4,000 feet of lumber, from sixty miles

up the country, in two days. This will make it a profitable business to cut lumber and firewood, and bring it to town from a large range of country.

How much the present wagon trade will be increased by plank-roads, is a fruitful and interesting theme for speculation. I am fully persuaded that the first twenty miles will pay from the present traffic; and that, by its own influence, it will create other branches of trade, which will daily increase its income. It will draw trade from the private avenues on both sides of it, and every mile added to its length will increase the ratio of its profit. Wood, turpentine, and lumber will furnish the business of the first fifty miles, after which will come the trade from the vicinity of Orangeburg. When the road shall have reached the rich agricultural districts of Edgefield, Newbury, and Abbeville, its capacity for business will be tested with the products of a populous and wealthy portion of our state. The facilities for economical transportation will be so apparent, that there are few who will not avail themselves of them. The advantages above set forth are so apparent, that, we think, they ought to convince the most skeptical that there will be a travel on it equivalent to at least 12,000 wagons, 150 miles each in a year, which, at four cents a mile, will amount to \$76,800 tolls, without taking into consideration the carriages, buggies, and horsemen that will use it.

The effect on Charleston would be, to bring back, with a tenfold increase, that important wagon trade which once gave value to King street; and to all the other property in the northern part of our city, an impulse might be expected which would, in a short period, extend the buildings of King and Meeting streets to, and even beyond, the new limits of our city.

All doubts, if any exist, as to the benefit the community at large would derive, or as to the profit which capital would yield, if invested in such works in our state, I think, will be removed by a knowledge of what the state of New-York is doing. There the whole country is traversed by canals and railroads; yet we see Macadamized roads being converted into plank-roads, and plank-roads by the side of railroads are paying ten per cent, after laying by eight per cent, for the renewal of plank-ing. We could quote many instances where plank-roads are regularly paying twenty to twenty-five per cent, on the capital invested. One of these companies in New-York, in its report to the legislature, states that 83,000 wagons passed over the road in one year. Allowing that each team carried an equivalent to fifteen bales of cotton, they would all have carried 1,245,000 bales, which is more than all the machinery of the South Carolina railroad could carry in two years. So great is the expansive power of these roads, that the whole

business of the year might be crowded into one month, and not affect its operation in the slightest degree.

It is certain that the animal power necessary to the production of a cotton crop is fully adequate to its transportation to market, over a plank-road, a distance of 200 or 250 miles. In one trip, every horse or mule could carry the result of his own labor to market, which method, in two or three weeks, would dispose of the crop. In no well-managed plantation would this seriously interfere with the economy of judicious agriculture. But let us suppose, in order to compensate for any loss of time, that the planter puts his own provender on the wagon for the trip, and gets his thirty-two bales of cotton to market with no outlay but for tolls, (say \$8,) for 200 miles; suppose, further, that to meet his expenses, he takes a return load of 12,500 pounds, at 30 cents a hundred. This would pay his tolls both ways, and leave him \$21 50 clear profit. The same would cost him on 200 miles of railroad, in freight on his cotton, at least \$1 25 per bale, or \$40; this, added to the \$21 50 earned by the return trip, over and above tolls, and we have a saving of \$61 50 by three weeks' use of a team, which would have to be fed at home, if not employed upon the road. The return loads of sugar, coffee, molasses, salt, iron, and other sorts of merchandise, would not always supply a full back load, but it is presumed that such facilities for transportation would lead to the improvement of land, by the use of lime, gypsum, and other stimulants of the soil. Oyster shells, five and a half tons to the load, would be a good return load for a back country planter.

To make the work complete, such roads leading from the country should be extended to the wharves; for a team could not haul more than a half load over a stone-paved street, and not even that, unless the pavements were kept in better condition than they are generally found to be, after a few years' wear. I have nothing to say against paving our streets with stone, for I believe it to be the only sure mode of finally exterminating the yellow fever from our city. But there can be no doubt that a good plank-road leading from our railroad to the wharves and wholesale portion of the city, would reduce the cost of drayage on heavy articles at least one half. Those who are well informed on the subject, estimate the drayage to and from the railroad in Charleston to cost fully \$50,000 per annum. The railroad companies which have been receiving and transporting iron over the South Carolina railroad for the last three years, would have saved money by the construction of a plank-road at their own cost to the shipping. As to Macadamized roads, experience has proved them not to be half as durable as planking; and every one who walks King street must see, from the mud which is constantly accumulating, that

Macadamizing is but a temporary work; for, unless the operation of relaying with broken stone is kept up, the carriage wheels will soon cut through in the mud. That street, in the widened portion, is thirty feet between the curb-stones, and twenty-four feet in the old narrow part. A plank-road, eighteen feet wide, laid in the centre and properly arched, with Macadamized edges next to the curb-stone, would be more durable, cost much less, and answer quite as well, if not better, than the present method. Its noiseless operations render it far preferable to stone paving, for a business street.

It is hoped that the time is not far distant when South Carolina will get tired of keeping up the state road, and be willing to give it to a company who will construct plank surface upon it, and render it one of the useful improvements of the age.

A half million of dollars expended by our city in thus extending her business to remote parts of the state, would truly be sowing seeds of prosperity, which would yield rich harvests for all time to come.

I am indebted for a large share of the information contained in this essay, to the report of A. A. Dexter, Esq., civil engineer, of Montgomery, Alabama, which I would commend to every individual who feels an interest in the subject. I have used both his figures and language, where I have found them to answer my purpose.*

* The positions taken by Mr. Gregg in favor of plank-roads, as against railroads, have been controverted by a writer in the Charleston Courier, who says: "It is difficult to find an instance in which the construction of a railroad has not benefited the agricultural interests of the country within wagoning distance of its line, as well as the towns at its terminus. Mr. Gregg tells us that railroads add, comparatively, but little value to the agricultural districts through which they pass. Let that gentleman inquire of the farmers and planters living along the railroads of the United States, if they do not consider their lands to have been enhanced in value by those works, and we promise him that their answers will bring him to doubt somewhat the soundness of his doctrines. We are to learn, for the first time, from this lecture, that railroads are only profitable to stockholders, when located on great thoroughfares for travel. An examination of the business done on nineteen twentieths of the railroads will show, that the largest amount of the trade is for short journeys, and in some instances the same may be said of the freighting business, showing, conclusively, that the great cities at the extreme ends of the lines furnish but a certain portion of the business. Mr. Gregg says, 'Out of 9,000 miles of railroad now in use in the United States, it is surprising to learn how few yield a profit commensurate to the capital.' If it be considered how much they have been extended and multiplied in some parts of the country, bringing them into competition with each other, the wonder will be that so many of them make their six per cent. The railroads of Massachusetts, taken as a whole, pay six per cent.; those of New-York pay the same, while there are several paying larger dividends. The average of railroads in Pennsylvania is something above six per cent. stock. Indeed, whenever railroads have been constructed through a country under tolerable cultivation, and without competing lines, instances of their being unprofitable are rarely heard of."

ADVANTAGES OF PLANK-ROADS OVER RAILROADS—1. Plank roads are more easily and cheaply constructed than railroads.

2. They are more easily kept in repair, and yield a larger and more certain return to the stockholders.

3. Produce can be carried over them at least twenty-five per cent *cheaper* than on railroads.

4. They are particularly adapted to the southern states, because of the abundance of timber here and the character of the power used.

5. They accommodate a larger number of people, because they can be carried almost to every man's door, while railroads cannot.

6. They tend to sustain a local population, and build up a home market in every neighborhood which they penetrate.

To these I may add that plank-roads are better adapted to an agricultural country, because they can be constructed and kept in repair by the planters themselves; and because the planters can own them and manage them so as to make the transient travel pay the expense of carrying their own cotton to market, and also return a handsome interest besides.

I know, Messrs. Editors, that many of your country readers particularly look upon every man who advocates the construction of plank-roads as a brainless visionary. They contend,

1. That the timber will decay so soon in this climate, that the road will be rendered worthless in a few years at most.

2. That the roads will be so narrow as to be perfectly useless for all practical purposes, especially where we have negro drivers.

3. That the planters will not travel upon them in consequence of the *tolls* charged; but give preference to the common roads.

4. That the country is not sufficiently densely populated to furnish either trade or travel enough to sustain them.

I will answer these objections in order.

1. It will take no more timber to build a plank-road than to lay the superstructure of a railroad, and it will last at least one third longer upon the former than upon the latter. The objection in regard to the decay of timber, therefore, is much stronger against the railroad than against plank-roads. The weight is so immense, that to render the former safe for heavily laden cars, timbers have often to be thrown away before they are half decayed. This would not be the case with plank-roads. In the northern states the planks used are of hemlock—a soft, sappy wood—and yet they last some ten or twelve years. It is but fair to conclude that yellow pine will last as long at the south as the hemlock will at the north. If this be conceded, the question is settled, because, even in the least densely settled sections of New-York, these roads are paying from 25 to 40 per cent. upon the cost of their

construction, after laying up a reserved fund sufficient to rebuild them every ten years.

2. If eight feet be found to be too narrow for these roads at the south, it will be an easy matter, in consequence of the abundance of timber and the levelness of the country, to increase the width to twelve, or even sixteen feet, and still to restrict their cost within the sum paid for their construction at the north. Eight feet at the north, where the population is much more dense, is found to be quite ample. The road is so well graded, so well drained, and kept in such thorough order, that wagons can turn out at any point with perfect convenience.

3. That planters will not pay the *tolls* to enjoy the benefits of these roads, no sane man can believe. Let us suppose a road constructed from Macon to Talbotton, say sixty-five miles in length. It now requires a six-horse team nearly four days to haul eight bales of cotton from Talbotton to Macon. At \$5 per day, the cost of delivering these eight bales would be \$20. By a plank-road the same team would deliver twenty bales in two days, or at a cost of \$10. In one case the hauling costs \$2.50 per bale; in the other only fifty cents per bale. It is plain that the planter or wagoner could afford to pay \$1 per bale toll, and then save \$1 per bale, in addition to the saving in wear and tear of wagons and horses. Nothing is plainer than that men pursue their interest, and planters are just as quick to discover their interest as any other class of men. A road to Talbotton would concentrate at that point 20,000 bales of cotton, and a branch from it to the Waymanville factory would concentrate there 12,000 to 15,000 bales more. Can any man doubt that the planters would not gladly pay the tolls and use the road in preference to the common roads of the country? I think not.

4. The idea that the country is not densely enough populated to sustain such a road is equally incorrect. The roads themselves will soon supply the necessary density of population. This has been pre-eminently the case with railroads and canals. The increased value of property along the Erie canal was more than sufficient to pay for its construction, and this increase was occasioned by the demand brought about by the influx of population.

PLANK-ROADS.—The following, taken from a recent report of O. G. Gates, Secretary of the Kentucky Board of Improvements, contains valuable and interesting information to those interested in road improvements:

1. The system of plank-roads, which originated in Russia, has since been adopted in Canada, and in many of our northern states entirely superseded the Macadam and Telford rock or gravel roads. The great success and value of the plank-road consists in the cheap-

ness, in ease of draft, in speed, and in comfort to passengers.

2. The approved mode of construction thereof is as follows: For a single track the planks (of pine, hemlock, oak, red elm, black walnut, or sweet gum) should be eight feet long, and from three to four inches thick; they should be laid across the road at right angles to its line. These planks are to rest on two longitudinal sills or sleepers, each four inches square, bedded in the earth to their full thickness. The earth should be fully kept up to the planks at every point, in order to prevent confined air resting in any vacant space beneath the planks. No pin or spike is needed to confine the plank to the sleepers, their weight being sufficient to keep them firm. There should be placed on the upper surface a coating of sand an inch thick. There should be provided for a single track turn-out places—and to effect this, an earthen road must be banked up ten or twelve feet wide on one side, and two or three on the other; each embankment should be made flush with the ends of the plank, and thence sloping outward so as to carry off the water, as perfect drainage is the great secret in the construction of any kind of road. The plank should be laid even, with part thereof projecting two or three inches beyond the general line of the road, in order to prevent ruts made by wheels at the junction of the plank and each turn-out. And if the bed on which the planks are to be laid is a new one, it would be better to be travelled one season before they are laid down. One track, with the supplementary earth road thus formed, will be sufficient for all ordinary travel. And, if the tonnage transported on the road be chiefly in one direction, the track should be laid on that side of the road which will enable the loaded teams to keep it, and thereby force the unloaded ones to do all the turning out.

3. To make a double track, all that is needed will be to make two tracks each eight feet wide, or one sixteen feet wide. The former is preferred. For the sixteen feet track, three or five longitudinal sills are required, each to be four by six inches, and laid edgewise and imbedded in trenches six inches deep. These timbers should be from fifteen to twenty feet long. Great advantage is obtained in the construction of the double track with long plank, by giving the road bed a slight convexity of two or three inches in the centre, and springing the plank down to the outside sills, and attaching them thereto by half inch spikes or nails three inches long.

4. The duration of plank-roads is from eight to twelve years; this matter, however, depends entirely upon decay from rot, and not by the surface wear of the plank. The sand which is spread upon the track when finished, protects the wood from the shoe soles of the horses, (which cause most of the wear,) and

soon penetrates the grain of the plank, until, with the woody fibres and the deposit on the road, a tough elastic covering is formed, whereby the plank is saved from the further wear. Experience teaches that one half the wear and tear of seven years occurs in the first year. Therefore, it is a matter of great importance on these roads to have small tollage, in order to invite such an amount of travel as will promote their wearing out instead of rotting.

5. The cost of the plank-road greatly depends on its locality. But it will be found the following estimate will approximate to an average valuation, to wit:

For one mile of road with a single track, (made with plank eight feet wide and three inches thick,) will require 126,720 feet board measure of plank, and of sills 4 by 4, 14,080, making in all of lumber 140,800 feet, and costing say five dollars per thousand, would equal the sum of seven hundred and four dollars. The laying and grading will cost from thirty cents to a dollar per rod, or from ninety-six dollars to three hundred and twenty dollars per mile. The earth-work, sluices, bridges, and contingencies, admit of no average estimate. Therefore, without them, and one hundred dollars per mile for engineering superintendence, and one hundred dollars for gate houses, we have the total cost per mile from one thousand to one thousand two hundred and twenty-four dollars.

PAPER MANUFACTURE IN THE UNITED STATES.—We have, on a previous occasion, adverted to the importance of this branch of our industry, so rapidly being carried to perfection in our country. In 1846, the capital employed in the manufacture was estimated at \$18,000,000. There were 700 mills, producing annually \$17,000,000 in paper, and employing 100,000 persons of all ages. Cost of stock used, viz, rags, old rope, waste cotton, etc., \$8,000,000, without reference to the quantity of soda, pearl and potash, coloring matter, coal, iron, wood, oil, sizing, etc., valued at \$2,000,000 more. Wages of workmen in the business, \$6 to \$9 per week.

In reference to writing paper, Mr. Cist, of Cincinnati, publishes some curious particulars:

Cap, as applied to paper, is of modern use entirely, at least in certain parts of the United States. Not more than thirty years since I was familiar with the phrase foolscap, and I distinctly recollect how "cap," its abbreviation, grated on my ear, upon first hearing it, as much so as "pike," for turnpike, does yet.

The question is thus shifted to what is the origin of the phrase foolscap, as applied to writing paper, which has borne this name so long, that its origin is lost to most persons.

The kings of England, from Edward I, if

not earlier, granted various monopolies, either for the support of the government, or to enrich favorites. One of these was the exclusive right to manufacture paper granted by the first Charles. On the finer kinds, as a species of notice of the monopoly, the royal arms of England formed the water-mark. Vast sums were of course made upon this exclusive privilege to make and vend an article in such general use.

All these monopolies were swept away by the parliament which brought Charles to the scaffold; and in this particular case, by way of showing their contempt for the monarch, they directed the royal arms to be taken from the paper, as they had already been from sign-posts, public halls, &c., substituting a fool, with his cap and bells, as the effigy. This was done in 1649.

Most of the manuscripts written between that period and 1660 bear, accordingly, as a water-mark, a fool wearing the dress described as his costume in the court of the British monarchs. Cromwell, when made Lord Protector, changed the water-mark by substituting a dragon, grasping in his claws arrows of fire, and afterward putting his coat of arms in its place. This still occasionally appears.

Charles II., at the Restoration, replaced the royal arms, and enlarged the size of the sheet, which was much smaller than we see in modern days.

In England, paper of the size which the Rump Parliament ordered for their journals, bearing the foolscap effigy, is still in existence; and the title, as in many other things, is still retained for ordinary writing-paper, centuries after the reason for it has ceased, and now serves, as it will serve for ages, to designate all writing paper in ordinary use, as distinguished from paper designed to be folded in the form of letters.

This last class of writing paper has been reduced greatly in length, and widened somewhat to adapt it for a convenient shape in folding, and still bears its original name of post paper, applied to it from the mail or post by which letters were conveyed to their address.

So recently has the United States made its own paper, that most of our early letters written in the west, even as late as 1800, bear the impress of the royal arms. St. Clair, Harmar, Wilkinson, and Wayne's letters are all of this description.

POULTRY BUSINESS, &c.—The following table, compiled from the census of 1840, exhibits the value of the poultry at that time in the several states:

Maine.....	\$123,171
New-Hampshire.....	97,862
Vermont.....	176,437
Massachusetts.....	540,295

Rhode-Island.....	61,492
Connecticut.....	176,659
New-York.....	2,373,029
New-Jersey.....	412,487
Pennsylvania.....	1,033,172
Delaware.....	47,466
Maryland.....	219,159
Virginia.....	752,467
North Carolina.....	544,125
South Carolina.....	590,594
Georgia.....	473,168
Ohio.....	784,931
Kentucky.....	536,439
Tennessee.....	581,531
Louisiana.....	738,314
Mississippi.....	369,481
Alabama.....	829,220
Missouri.....	230,283
Indiana.....	393,228
Illinois.....	830,968
Michigan.....	82,730
Arkansas.....	93,549
Florida.....	61,007
Wisconsin.....	16,167
Iowa.....	17,101
Dist. of Columbia.....	3,092

\$12,176,170

The above table shows, that raising hens and chickens in the United States is no trifling business. The people are waiting impatiently for the census returns for 1851. When they come, they will probably show that the value of the poultry stock of the United States is more than \$20,000,000 annually.

From the foregoing table it appears that the value of poultry in the single state of New-York is more than \$2,373,000; while, according to the United States census, the value of all the sheep of that state is less than that sum. The value of the poultry of New-York is greater even than that of its cattle, and five times greater than that of all its horses and mules.

The amount of poultry sold at a single market, in Boston alone, in 1843, was \$674,423; and for the whole city, during that year, it exceeded \$1,000,000. We have no accurate statistics for our other large cities, but it is highly probable that the poultry trade, in such cities as New York, Philadelphia, Baltimore and New-Orleans, must be counted by millions for each.

The statistics of the egg trade are equally curious. The city of New York expends annually for eggs, \$1,500,000. It consumes half a million of eggs monthly. The Astor House alone is said to require a supply of 1,000 eggs a day, for five days in the week, and on Saturdays 2,500.

At a single market in Boston there were sold in 1848, 1,129,735 dozens, which, at the average price for the year, amounted to

\$208,352. For the whole city, during that year, the sales amounted to about \$1,000,000. The state of Maine shipped to Boston in 1848, eggs to the amount of \$350,000; and a single house in Cincinnati is said to have dealt in them to the extent of \$100,000.

We are indebted for these statistics to a work on poultry, by Mr. J. C. Bennett, of Boston. We might extend them much farther, but the foregoing are sufficient to show the importance of the trade of the United States in poultry.

The egg and poultry trade of France exceeds \$57,000,000 annually. England has invested in the poultry trade \$50,000,000; France, \$73,000,000; and the United States, \$15,000,000.

The business of raising poultry, in this country, is left almost entirely to chance. There can be no doubt that if the same attention was paid to it that is bestowed upon the raising of sheep, hogs, and cattle, the trade would be increased tenfold.

We are glad to see that efforts are beginning to be made in the south to improve this branch of rural economy. The efforts of Mr. Lawrence and others, to introduce the finest species, are praiseworthy, and ought to be encouraged. Mr. L. has obtained the following rare varieties: Red and Buff Shanghaes, very pure; White Shanghaes, a very scarce variety; Cochin-Chinas; large Eagle Fowls, or Imperial Chinese; Poland Fowls, and Chittagonga.

For the information of those who would wish to know something of the natural history of these species, we add the following brief description of each:

The *Shanghaes Fowls* are of two varieties, the red and buff, or yellow, and the white. They were originally imported from the city of Shanghai, China, whence their name. The plumage of the Yellow Shanghaes is usually of a bright yellow or gold color, variegated with dark brown and red. Their legs are uniformly large, and usually a bright red and yellow or white mixture, sometimes flesh-colored, and very heavily feathered. The tail is short, body well formed, wings small, and high on the sides; comb single, straight, and serrated. The feathers are rather fine and downy. These fowls grow to a large size, and when full grown, weigh about nine pounds. The male Shanghaes, when full grown, and standing erect, carries his head about on a line with the height of a common flour barrel.

They are very prolific. They commence laying when from five to seven months old, and a single fowl has been known to lay 120 eggs in 125 days. Their eggs are yellow.

The *White Shanghaes* possess all the characteristics of the yellow, with the exception of color. The Shanghaes fowls command a

high price; they bring from \$15 to \$25 a pair.

The *Cochin China Fowl* has been only very recently introduced in Great Britain, by Queen Victoria, who is styled by Mr. Richardson, "that royal patroness of poultry fanciers." These fowls so far exceed in size our ordinary domestic fowls, that persons not conversant with zoology have referred them to the Bustard family. They are, however, genuine poultry. Some of the males have been known to weigh from thirteen to fourteen pounds. The average weight is from seventeen to twenty pounds the pair.

Their general color is rich glossy brown, a deep bay. On the breast there is "a marking of a blackish color, and of the shape of a horse-shoe." The comb is of moderate size, serrated, and the wattles are double. The wing is strikingly peculiar; it is jointed, "so that the posterior half can, at pleasure, be doubled up, and brought forward between the anterior half and the body. The bird can do this at pleasure, and the appearance the manoeuvre imparts to their form has procured for them the title of Ostrich fowl."

The Cochin China fowl is very prolific, frequently laying two, and occasionally three, eggs on the same day. The eggs are large, of a chocolate color, and possess a very delicate flavor.

The *Polish fowls* are very beautiful; they wear tufted crests. There are three varieties—the *Spangled Polish*, a bird of rare beauty, its plumage presenting a symmetrical and regular combination of bright orange, a clear white, a brilliant green, and a jetty black, softened down with a rich and pure brown, and every feather being tipped with white, whence the term *spangled*; the *Black Polish*, of a jet black throughout, except the crest, which is a white tuft; and the *White Polish*, of a brilliant white throughout, except the crest, which is a jet black tuft. The Polish fowls produce large and finely-flavored eggs.

Lastly, the *Chittagonga*. These are the most remarkable, for size and beauty, of all the varieties. The Chittagong is the true *Gallus Giganticus* of the zoologists, and excites astonishment and admiration in all who behold it. It is a native of Sumatra. The male is frequently so tall as to be able to pick crumbs without difficulty from an ordinary dinner table, and weigh from ten to fourteen pounds. The average weight of a pair is about twenty-two pounds. They are the largest domestic fowls in the world, of various colors, and produce large rich eggs.

POLITICAL ECONOMY, GOVERNMENT, Etc.*—Of the two sciences, political

* Lecture by the Editor in University of Louisiana.

economy and government, (if, in their still crude and imperfect state, the term science be strictly applicable to either,) it may be said generally, the aim of the one is to direct the action and control the excesses of the other, in all those points in which the *public wealth* is involved. This, though it be far from the whole mission of political economy, is yet the most important part of that mission.

The public wealth is an essential element of that public welfare, with which all governments are charged. It comprises every thing which relates to the physical well-being of a people; and as this physical well-being is at the bottom of all social and moral progress—all advances in letters, arts, sciences and civilization—the promotion of public wealth may, indeed, in a liberal and enlarged sense, be considered the whole duty of government. Political economy comes, then, to be considered coextensive with legislation, and sound law is necessarily based upon its principles.

If political economy, like some of the exact sciences, had attained perfection, which is far from being the case in its present stage of infancy, and all its rules and principles were susceptible of demonstration, we should have no more of that multiplicity of legislation, which results from the continued enactment and repeal of laws, unless, as is too apt to be the case, governments should be administered by the ignorant, and statesmen, mis-called, prefer to pander to popular prejudices or court its acclamations, than carry out the great principles which are founded in truth and reason.

That this last supposition is not improbable, may be inferred from what is every day seen, even in the most enlightened governments: for it will not surely be denied, that there are some, and we believe a great many, settled principles in political economy, as demonstrable as any moral truths can be, of which ignorance is frequently betrayed in high quarters, and which are openly violated under one pretext or another, or with seeming unconscientiousness.

That the law-givers, or law-makers of the world, whether by the divine right which made kings and despots, or the diviner right of representatives of the people, have in reality, and in most instances, acted from the best knowledge within their reach, with sincerity and with honest intentions toward those whom they were called upon to govern, need not for our purposes be denied. No sufficient reason for an opposite course can be alleged. Even the most base and heartless tyrant could not but perceive, unless blinded by the worst madness, that his own state and splendor is in some degree dependent upon the extent and prosperity of his realm and his subjects. A systematic warfare against all industry, enterprise and progress, was never, perhaps, the

object of the most crushing tyranny the world ever knew.

History is not, indeed, without instances, in all ages, where such systematic warfare appears to have been waged against industry and enterprise, by even the best class of governments. A careful examination of the existing powers of the world would, perhaps, present us many such instances of warfare, more or less considerable, notwithstanding all the progress which has been made in civil liberty, science and civilization. Radical differences in the principles and forms of government will not explain these phenomena: they are wholly independent of them. To conceive a republic more unfavorable to enterprise even than a despotism is not difficult, since, if forms of government be much, they are not every thing. Though we may not admit the best administered government is best, merely theoretic perfection should have no favor.

To a misapprehension of the true purposes of government, and of the mode of promoting the real welfare of the state, may be traced the greater portion of the evils which society has suffered. Men have not known the truth or the whole truth. They have legislated without light, blundering on from age to age—the precedent of the sires being sufficient for the sons. Nothing so absurd as not to have had an advocate. The more conscientious, the more dangerous and inveterate the error!

The most difficult and perplexing of all sciences is, without doubt, that of government. It requires almost prescience, in many cases, to see the bearing and results of political measures; in all cases it requires more than ordinary apprehension. We are told that the Romans had laws teaching how to make laws; but this could not have applied to other than the mere forms. The acquaintance and study of facts and results, as they are worked out in the movements and machinery of society, from the masses up; under all circumstances, most propitious or adverse; in all times, in all countries, are more indispensable conditions of the statesman, than all the logic and metaphysics of the schools, all the philosophy of the closet.

Experience, which is so excellent a teacher in regard to almost every thing in which we are interested, gives not so clear and unmistakable a light in this particular. There are so many counteracting influences and causes at work, so many undefined operations in society, that it is not singular the real sources of evil are so often overlooked and the wrong ones imputed. The results sometimes are very distant. The hand which strikes the blow, the blow itself, may be secret, and yet the mischief be as sure and as irreparable. This is akin to what Bishop Butler remarks of the moral government of the world: the punishment of an

invasion of a law of nature follows not always so immediate as to be traced to that invasion.*

The study of the true sources of national prosperity is almost altogether of modern date. It is later even by far than the philosophical and metaphysical regeneration effected by Bacon and Locke. A century has not passed since the first impulse was given to these investigations, by the publication of a work which has deservedly immortalized the name of Adam Smith.

Without defining what is called political economy, or entering into any disquisitions upon it, this may be said without controversy: that, in addressing its teachings to the rulers and legislators of the world, what they ought not to do is a far more important lesson, than what they ought. The "masterly inactivity," proclaimed by one of our statesmen, is a safer general rule than constant intervention. There is never any danger that legislators will not do enough in the enactment of every character of laws, and concerning every character of subject. Their vanity of place, the importance which they fancy belongs to a law-giver, whatever the length of his ears, are motives strong enough for this. Perhaps, in the very worst governed society upon earth, there are good laws enough in force to insure the highest degree of liberty and prosperity, were they not clogged by others that are absurd and inimical! A repeal of all these worst laws, however numerous, would not necessarily call for the enactment of better ones in their place. Enough of such laws may already exist.

"*Thou shalt not*," then, is a far more frequent and useful injunction, in the decalogue of political science, than "*thou shalt*;" and in teaching the people, the *governed*, (if they can be supposed to require instruction in what is for their best interests and permanent welfare, in all their various avocations of life, as they certainly may be,) a field is opened which exhausts the whole subject of political economy.

That that is "the best government which governs least," and they the happiest people who have delegated the fewest powers to be exercised by others, may in general terms be affirmed. To say that the world has been too much governed, is to say that it has been badly governed—since each additional restraint, beyond what is absolutely necessary, constitutes an additional link in the chain of oppression. Simplicity and precision are the perfection of all laws. Call it democracy or despotism, that government is a tyranny which delights in weaving the legislative web to entangle its subjects. The most powerful, as the Greek philosopher

held, are sure to break the web—the weaker only struggle in its folds.

In the promotion of public wealth or the public welfare, all that in reality is required from government, is such a system of legislation as will effectually protect the citizens from wrongs and outrages upon their persons or property, abroad or at home.* The conservation of life, liberty and property is every thing. We say *conservation*, which supposes the citizen first to be in possession. Government has nothing to give. Every act of giving, on its part, is a mere act of transfer from one to another, leading often to partiality, always to injustice. The subjects of a government are all upon an equal footing, a condition at war with the idea that *special* benefits may be conferred upon any. If government cannot give, it cannot take away, except for offenses which are *previously* determined.

Ignorant, indolent or bad men, will always be clamorous for support from the public crib, since it is congenial to them that others should be taxed for their support. There are more paupers in every country than can be found upon the poor list or in the work-houses. Were the truth known, the latter class might be found far less detrimental to public prosperity, though both equally prey upon their fellows. These reap where they have not sown. Like Ishmael of old, their hands are turned against all men—and would to God the hands of all men were turned against them!

Were not Hercules's stout shoulders near at hand, it would be seen how well at a pinch the wagoner could help himself. Men never mistake, in private affairs, very widely, or for any time, their true interests, *if left to themselves*. They may safely be intrusted with their own affairs. In the conflict of various and opposing interests, they become acute enough. A perfect immunity to act as it best pleases them in all matters, so that wrong be not done to others or to the community, is the golden rule of liberty as of economy!

But then, as in physic, from ignorance of the nature of the malady which afflicts him, the patient will never think himself likely to do well, unless learned prescriptions are administered. The doctor finds it to his policy to gratify the caprice by applications which are innocent of all effect. In this, he is more likely to succeed than the political charlatan in the same circumstances, who has not at hand so many innocent appliances; yet, something he must do, and that speedily. In the revolutions of fortune's wheel, thousands and thousands are at the bottom. They have

* Mr. Hume says, "The whole paraphernalia of commons, lords, army, navy, judges, king, is for the just end of bringing twelve honest men into the jury box."

* See the "Analogy."

been left there by their indolence, by their profligacy, by their vices, or, it may be, by inexplicable fate; no matter, they are there. The more successful come soon to be regarded with envy and with hatred. Even virtuous success gives no pleasure, and is a standing reproach to adversity. Shall we wonder that these tens of thousands raise the cry of *oppression*, that they have hearers ever ready to make capital in their advocacy, and that wise and prudent men find it necessary to make some show of assistance, when they often know such assistance, in reality, to be out of their power? Whosoever, says an old philosopher, goeth about to persuade men they are not so well governed as they might be, will not want for ready and attentive listeners. It is easier to attribute the misery which is suffered to the government than to the fault of the sufferers, though government, in truth, have nothing to do with it. It is much more convenient to look for relief from this quarter than from the man's own exertions. Hence is it, there must be a *law* of some sort or another—and a new law is there-upon made. Most of the agrarianism and socialism and Fourierism of the world has its origin in this discontent with the *natural state of things*. It is more complimentary to our pride to be governed by our own laws and systems, than by those which are merely of nature.

It is natural, and, if natural, proper—though we may not see the reason—that poverty, and want, and disease, and misery should be the next-door neighbor of wealth and unbounded prosperity. The towers of the palace cast their shadows down upon the roofless hovel, as naturally as the mountains do upon the neighboring hills. Yet that nobleman has not oppressed that beggar. He may, indeed, be liberal, and generous, and just, and mourn over the misery all the wealth in the world could not relieve. Nor is the beggar a victim of society and its laws. Without that society, or those laws, he had not existed—he could not exist with the same security—his fathers before him had not prospered, (for generations of misery in the same household is scarcely a supposable case,) and his children would have no hope. Exclaim against Nature, that she has sent you in the world half finished, maimed, diseased, imbecile, an idiot—that you were born under the frozen serpent of the North, and must struggle against tumbling icebergs, or in the death-dealing breath of torrid suns; but limit not your complaints to these. In evincing her partiality in these respects, has she proclaimed an impartiality in every other? Is it not equally an outrage upon your rights, your equality, that your neighbor is taller, or stouter, better favored, more intellectual—or that he has broader acres, greater possessions and more comforts? All the governments in

the world could not prevent these distinctions. The worst government only would attempt it—for, in the effort, how much injustice and wrong must be done to those who, to say the least of it, have as much right to their possessions, however earned, as you have to take them away. The remedy is within yourself. It is for you to apply it. Be industrious, be frugal, be circumspect; if these remove not the evil, you have a claim upon the *benevolence*, not the *justice*, of your fellows. Sue, but not demand. If this benevolence fail, you are simply another victim of that inexplicable, yet, as we ought to believe, wise Providence, which strikes down without reason or explanation, and teaches the utter nothingness of man by her frequent indifference to his fate.*

Nor let us be charged with indifference to the miseries of poverty and destitution, which in all countries afflict society, though in different degrees. The poor must be fed, the miserable must be relieved, or humanity ceases to perform her noble mission. Send them not to government—call not for poor-laws and public workhouses. We are willing to leave man in the hands of his fellow-man. The Samaritan will pass by. The fallen brother will be taken to the bosom. Oh, we have faith in humanity: it is a gentle, sylvan stream, which flows undeviating in its course, refreshing the thorniest places. It has a universal language. "I am a man," is an appeal which is heard in the deserts of Africa, in the wilds of Siberia, and respected. Man ceases to be the enemy to his fellow-man, when that fellow has fallen. "Noble spirits war not with the dead." Private charity can relieve all the sufferings that public charity can, and more. Its operations are more effectual, for they are nearer the subject, and, when properly organized, are more discriminating—securing higher comfort at the same cost, with enhanced satisfaction to the donors, and less of that shame which is inseparable from a sense of dependence. A proud spirit might die, rather than take to the public workhouse, though well administered relief from friends would not be refused. A base spirit could not so well deceive individuals as the public, in regard to alleged wants and sufferings. Leave these things to society, and they will be attended. We shall have benevolent associations multiplying, kindness and generosity promoted, as well as enterprise and industry. In regard to these associations, how immensely superior is the present to any subsequent period. Scarcely a man but what is connected with some of them, and contributes to their support. Under whatever name they appear, they are all noble, and proclaim the great law of sympathy which pervades the universe. When government comes to be a *benefactor*,

* See the admirable satire in Juvenal, upon man's complaints about fortune—the sixth, we believe.

it is too often a robber—dispensing in charity, and for the relief of conscience, its ill-gotten gains.

Having thus taken the extreme case, in which, if any, government might be held bound to legislate for the benefit of particular classes, and proved, that not only does no such power exist, but that its exercise, if existing, would be impolitic, less effectual, more costly, than individuals and society left to themselves would find it, little difficulty can be found in all those other cases, and they are innumerable, where men are clamorous to have their peculiar conditions benefited by *special laws*, their wealth increased, or their plans and enterprises promoted.

And, to say the truth, these latter calls, time immemorial, have been more frequent than the former, and, from their nature and the character of the persons making them, more likely to be heard. The agriculturist, the manufacturer, the merchant, have left their farms, their work-shops and their counting houses, and essayed the far readier mode of acquiring wealth to be had from Westminster Hall or on the floors of Congress. We shall take occasion to enumerate some of their labors and the results, in a general sketch of the interference of governments with industry, in all countries, from the earliest times to the present. From these, more instruction can be derived than from any philosophical disquisition. We shall then see the true secret of national wealth and prosperity, and in what it consists.

Agriculture being prior, in time, to the other arts and pursuits, and, as it were, the mother of them all, we naturally begin with it. Always held in honor, it has been self-sustaining, and, with unimportant exceptions, self-reliant. The tillers of the earth have been content with the bread it yielded to honest toil. Monsieur Quesnai, in the reign of Louis XIV., did, indeed, attempt to teach them that they, of all men, deserved the special favor of government, in that they were the only *real* producers of wealth. An exemption from taxation was naturally one of these favors; and, with such a theory, it was not hard to make the farmers the pet children of legislation. The splendid fallacy of this great Frenchman exercised for some time a high and controlling influence, as may be marked in many of the events which followed, and which has not yet, perhaps, been entirely dissipated. The famous corn-law controversies, which agitated Great Britain for the last century, is a result of the favor claimed for the agriculturist. To multiply bread, the nation has, at one time, forbidden its *exportation*, and at another, its *importation*—undoing in one reign or parliament the work of another, and vacillating between both extremes. They have not legislated the nation, however, out of famines, or the chance of

famines; and nothing more clearly demonstrates the *inutility* of such legislation, to say the least of it, than this, that the very *opposite* courses have been adopted or advocated, at different times, to *secure the same ends*. It has been even thought, that the product of bread might be stimulated by bounties, as though the appetite and natural wants of man were not sufficient stimulus for every purpose. An artificial or legal bounty presupposes that there is no natural one, and, consequently, no existing want. A natural bounty is that reward which a producer receives for the labor expended upon a commodity *in demand*. If no such sufficient bounty be afforded, there is, really, no sufficient demand; and in this case the commodity ought not to be produced. The farmers, too, are frequently admonished of the value and importance of the *home market* for their grains, as if there were, in reality, any other market. Every bushel of wheat or potatoes, every blade of corn, rye or rice, made in America, or in any other country, excepting, perhaps, Ireland, is consumed in it. Not in bread and puddings, altogether, yet certainly for the most part—but in cottons, broadcloths, silks or wines, or whatever else it is converted into. Though a peck of corn satisfy my natural wants for a week, yet, in one sense, I consume a bushel or more daily. It appears in my coat, my hat and my boots, for which it has been exchanged. Or, if it be said, our pregnant grain crops are not consumed at home—pray, tell us where they are consumed? Do we toil that others may reap the harvest, and become the hewers of wood and drawers of water for the world at large? Far otherwise the Yankee character. What our fields produce, we enjoy—and sometimes a little more, by running in debt to foreigners.

But, to do the agriculturists justice, they have not been very noisy applicants for government patronage, in comparison with others; since, as Adam Smith remarks, farmers and country gentlemen, dispersed in different parts of the country, cannot so easily combine as merchants and manufacturers, who, being collected in towns, and accustomed to that exclusive corporation spirit which prevails in them, naturally endeavor to obtain, against all their countrymen, the same exclusive privilege which they generally possess against the inhabitants of their respective towns.*

The question of *manufactures*, as another great branch of industry in flourishing nations, presents itself next. Capitalists have, in almost

* The Louisiana planters have received small share of government favor. The cotton lords and iron lords of the north have no objection to any amount of aid; but then, when you come to sugar, why, they tell you, "that is one of the necessities of life—you must not tax that; no, nor tea either, nor coffee."

every country, conceived the chances of success but slim and problematical, in this field, without the arm of government for a shield. If a nation must be fed, it must be clothed; and in the elements of heat and cold there are no sufficient stimulants for the production of this clothing! The *exportation* of the raw, unwrought material was made, by the statutes of England, felony, and its *importation*, from every quarter, encouraged, even by bounties. It would not be difficult to enumerate the various measures which have been adopted in favor of the manufacturers, in enabling them to compete, as it is claimed, successfully with foreign competitors. But we have not the time now.

The *merchants* have been the last important order to grow up in the world. Ignorance of navigation, and the barbarous systems of international law which converted foreigners into slaves, stifled the commercial spirit of antiquity. Trade was held in disrepute both in Athens and at Rome. The Romans *prohibited* it with barbarians. After the fall of the Roman empire, and on the growth of the feudal system, all industry naturally declined, and commerce was out of the question. The discovery of the western world began a new era. The colonial systems had their origin now, and came soon to be curiously elaborated. The object of these was to build up the commerce of each state at any and every expense. The merchants of each community were supposed to be naturally at war with those of every other. Their jealousies and rivalries were extreme. Reciprocity was impossible. All of them appealed to their respective governments for aid and protection against each other, and it became universally popular to grant such aid.

It would take a volume to enumerate all the laws that have been passed in support of the merchant interests of the world. The course of Britain and her colonies would come under particular and minute examination. For the encouragement of a particular interest, measures the most preposterous have been adopted by her, and injurious, in the last degree, to the nation at large. "The tariff, or customs of England," remarked Mr. Montesquieu, "are very unsettled; with respect to other nations, they are changed, in some measure, with every parliament, either by taking off particular duties or by imposing new ones. They endeavor, by this means, still to preserve their independence. Supremely jealous with respect to trade, they bind themselves but little by treaties, and depend only upon their own laws. Other nations have made the interests of commerce yield to that of politics; the English, on the contrary, have always made their political interests give way to those of commerce. They know better than any other people

upon earth how to value, at the same time, these three great advantages—religion, commerce, and liberty."

In regard to France and Spain, and the other great commercial powers of the old world, the measure of injustice has been heaped up to overflowing. Mr. Burke, indeed, spoke of the colonial system of France as the perfection of administrative wisdom; though it is thought he was more dazzled by the *results*, which, in such productive regions, were brilliant *in spite of* every evil influence. The system was held up by enormous taxation at home, and very light taxation in the colonies. That the colonial policy of France was the most injudicious and expensive that could have been conceived, with regard to the people of France, and almost the worst that could have been planned for the retention of the colonies, is amply proved by facts.*

Old Spain seemed to have determined to make the most of the new world, of which she had by far the most prolific and extensive portion. The perfection of restrictions, established by her for the benefit of particular classes, has long ago met with its appropriate reward, in the ruin of every class. She built up exclusive commercial companies in Cadix and at Seville, the most magnificent of the age, and these merchant princes, in their unparalleled profits, sapped the very life-blood of the nation.

"Spain," we quote again from McGregor, "with absurd regulations which embarrassed and ruined her colonial commerce, was unable to export or manufacture the raw products of her vast colonies, and would neither permit them to be exported or manufactured by the colonists, nor suffer foreigners to export them and give in exchange to the colonists those articles that they most wanted. A contraband trade necessarily arose, and this illicit trade reduced the price of the products of those colonies to a wretched rate, as their sale depended upon an uncertain arrival of a greater or less number of smuggling vessels, &c. Spanish colonial commerce and agriculture constantly languished; yet some colossal fortunes were acquired in two or three years by generals, intendants and commissioners of customs."†

In the United States, the merchants have frequently complained that, in the administration of government favors, they have been overlooked. Certain it is, they have not been conceived in need of the same kind of countenance that other interests were thought to demand. There are few instances that can be pointed to, where we have made any special efforts to build up particular classes of com-

* McGregor's Progress of America, book viii., chap. 1.

† Ibid., book vii., chap. 1.

merce, unless the general theoretical favor shown to the *home trade* be an exception. No particular benefits have been intended or conferred, and the aids extended have rather been the legitimate ones of treaty regulations and consular missions. Though a great commercial nation, we seem to have been more solicitous to build up manufactures. It is not so clear, however, if we have not specially benefited, that we have not sometimes specially injured, commerce by our legislation.

Under the three great heads of agriculture, commerce and manufactures, all the direct interferences with the industry of a people, on the part of their rulers, might strictly be classed. We have aimed at a mere general enumeration, without regarding those important interferences of "trades unions," and apprentice associations, and strict corporations, which, after the downfall of the feudal system, began to grow up in the then forming towns of Europe. They have not yet ceased to exist, and our most respectable mechanics will, even now, admonish us of the importance of close corporations of particular tradesmen, for the purpose of securing adequate or high wages, and for putting down the oppression of crushing capitalists and unlicensed competition. All such measures belong to the one great, but erroneous system, which supposes industry and enterprise *impotent* in defending themselves, and incapable of marching onward to prosperity when left in the most perfect freedom.

Government, we should take it as an axiom, was never a creator of wealth since the world was known. It can never produce two blades of grass where but one grew before. It may take, and does take—often rightfully but more frequently unrighteously—money out of the pockets of the people, rather than put any in. It is but the creature of men—supported by their contributions, guaranteed by their necessities, and ceases to exist at whatever moment they will it. Men have formed themselves into political unions for protection and defense. They have required a shield, and not a sword. They have seen the importance of submitting to some privations of national liberty for the sake of greater benefits. These benefits are called regulated freedom; and all unnecessary legislation must be repealed—since, if it can be proved a law does no good, it necessarily does harm! Would that an enlightened political economy could teach the rulers of the world to have an unlimited confidence in the elasticity, in the potency, of industry—unfettered, uncontrolled, free—in the production of national wealth and prosperity, and an unlimited *trust* of their own powers of directing, establishing or promoting this industry!*

When it is asked, Which have been the most prosperous countries in the world? it must be answered (other things being equal, or, even often, very far from equal)—*the freest*. In a despotic country, men will not aim to accumulate, but rather to hoard what they have. There can be no enterprise, if an arbitrary government may interfere in its results and appropriate them to itself, either by extraordinary taxation, or—as in Turkey and Russia, and many eastern countries—by cunningly devised laws, or even by open violence. Remove the securities and bulwarks of property, and it ceases to be valuable. The interest of the slave, the serf or the villein, is to squander what he has rather than to add to it. Hence, the low state of industry where men find themselves in this condition.

It is not difficult to determine the true sources of national prosperity, though the most egregious errors have been made in doing it. Why has one nation advanced forward to wealth and power, while another—and a neighbor—has remained stationary or declined? How can the extraordinary progress of the United States, within the short period of its history, unparalleled in the annals of man, be accounted for upon satisfactory principles?

We answer, without qualification, the industry of this country—though the exceptions are not few or unimportant—has, in every period, been *free*. Without this, it were in vain that an empire of wealth lay buried in the bosom of the continent awaiting the hand to develop it. There would be no such hand, as Spanish America has shown.

We say, her industry has been free, which supposes a legitimate, sound and liberal government, multiplying, in no instance, restraints, without an honest conviction they are for the public weal. The error of policy, once clearly pointed out, has almost always been followed immediately by its removal, if not in whole, yet in part. One may hope for such a country an ultimate perfection, from the constant application of the principles of a sound political system.

But this will not be to say every thing, though it be much, that our country is *free*. The people themselves, who are to prosper from freedom, must be an industrious and an enterprising people. The African, when released from the dominion of a master, becomes the double slave of indolence and want. As much depends upon *racés* as upon political institutions. The United States have been peopled by the Anglo-Saxon, whose indomitable spirit is broken by no toil nor labor, and whose enterprise and activity are baffled by no combination of difficulties, dangers and obstructions. This has been the ruling element

* If we seem trenching upon party ground, the reader will give us credit for fairness in having pub-

lished, several months ago, a very strong article in our pages, advocating the protective system.

of our population, and the other elements have gradually assimilated themselves to it. The Spaniards inhabited a garden spot at home, and they sought a paradise in America. At a time their northern neighbors were struggling with icebergs, a prolific soil yielded them wealth, with only the labor of taking it away. Yet, where is the empire which this people have established upon the American continent?

There must be a free government and an enterprising people, but there must, also, be a soil, climate and country, favorable enough and extensive enough to operate upon. In these, the United States have been signally blessed. Our climate is adapted to every branch of industry and enterprise. We include the ice cutters of New-England, the fur catchers of Oregon, the sugar and cotton growers of Florida and Texas. Without so various, and yet so advantageous, a distribution of climate, a nation could not thus advance. In the regions of Siberia, or upon the equatorial line, the Anglo-Saxon, with all his free laws, could do but little. Though the climate, too, be as favorable as Italy and as genial as Switzerland, and the soil rocky, sterile or exhausted, the results must again be different. Our soil is virgin, prolific almost in spontaneous products. And yet, because of such a soil, and without our other advantages, Ireland has been hopelessly beggared! Finally, the country must be capacious and susceptible of indefinite extension: and what country like ours in this respect? Fancy the original thirteen states to contain all the territory over which our population could ever have spread. Yet Russia has a territory as unlimited as ours, and Brazil one very nearly so.

All of these conditions must be combined to make a great and a flourishing people. No one of them, singly, can do it.

It is not that emigrants have been pouring in upon us from all the world; that we have been prolific and augmenting, in an uncommon ratio, by natural means—that any claim is now set up. Mere population is, in itself, no element of prosperity and wealth. A declining country may continually grow more populous, and a ruined one—as we have seen a notable instance of, in Ireland—may stock the world with its swarms of emigrants, and yet augment, each year, its *home* population. Population *often* comes when it is not wanted and where it is not wanted. It *never ceases* to come where it is wanted. Legislators need never stimulate it. In all old countries its increase should be restrained, rather than encouraged. In new countries it will augment as fast—taking long periods into consideration—as it is wanted, and in obedience to its own peculiar laws.

Though the United States had double its present population, it does not follow there would be double the wealth and prosperity. Certainly, a tenfold augmentation of popula-

tion would not be followed by a tenfold prosperity. Numbers and population are but an item, and the least important one, in estimating a nation's position and power in the world.

The best population may not exist in just proportion to the means of support, and national decline ensue. It is sufficient here to remark, with Malthus, "That a permanent increase of population is a powerful and necessary element of increasing demand, will be most readily allowed; but that the increase of population alone, or, more properly, the pressure of the population hard against the limits of subsistence, does not furnish an effective stimulus to the continued increase of wealth, is not only evident in theory, but is confirmed by universal experience." It is obvious, then, in theory, that an increase of population, when an additional quantity of labor is not wanted, will soon be checked by want of employment, and the scanty support of those employed will not furnish the required stimulus to an increase of wealth, proportioned to the power of production."

Having shown the intimate relationship subsisting between political economy and government, and how the doctrines of the one should influence the action of the other, and the two combined the industry and prosperity of a nation, but little can remain to be said.

Every circumstance, we have seen, which can give intensity to the laws of natural progress, has been constantly in operation in the United States, throughout every period of its history, and remains still in undiminished force. Let us be content with the results which have been achieved, and which as clearly indicate others, yet more brilliant, in the future. The industry of our people needs no monitors, as to its best mode of application under every possible circumstance—and, least of all, monitors made out of stuff such as our politicians usually are. As intelligence is generally diffused throughout the masses, they will perceive and admit this, and the one cry, every where heard, shall be, "*Let us alone!*"

Diffuse, then, knowledge throughout the length and breadth of this great country—multiply the means of information—send the schoolmaster into every hovel—dot every hill with the school-house and the college—let the press, without intermission, night and day, pour forth its steady streams of light—foster science and the arts—let the civilizing and godlike influences of machinery uninterruptedly extend; then will the future of our country open, boundless and great, beyond all example, beyond all compare, and countless ages bless its mission, and acknowledge its glorious dominion.

RICE—HISTORY AND STATISTICS OF.—The state of South Carolina, small in territory, a population, and in relative weight in the scale of the Union, is blest with a most delightful

climate, regarding together all the seasons, and in the possession of the elements of great and lasting wealth.

In the production of her two great staples, her agriculture exercises an important influence over the comfort and well-being of mankind. With the various manufactures of cotton wool, the greater portion of the human race are clothed. With the manufactured or prepared rice, the greater portion of the human race are fed—as an article either of occasional diet or of daily subsistence.

Rice was known and cultivated in the East from time immemorial. Whenever that hitherto sealed book, the Chinese empire, shall be opened to the inspection of mankind, we may learn something more of its early history and culture; at present we only know from the books that a large proportion of the inhabitants of that ancient dominion subsist upon it, and we are told that it is grown sometimes by transplanting on the shores of the rivers, sometimes on rafts covered with earth, and floating on lakes and rivers; that in some parts of China two crops are made from the same ground in one year, one ripening in May, the other in October or November; that the seeds are there white and oblong, but vary in size and form; that a small spot of ground is inclosed by an embankment lightly ploughed and harrowed, and the grain, previously steeped in dung diluted with animal water, is then sown thickly on it; a thin sheet of water is immediately brought over it, either by a stream or chain pump. When the plants are six or seven inches high, they are transplanted in furrows made by the plough, so as to stand about a foot apart every way. Water is then brought over them, and kept on till the crop begins to ripen, when it is withheld; so that when the harvest arrives, the field is quite dry. In Japan, Ceylon, and Java, aquatic rice is cultivated nearly in the same manner. To this grain the Chinese and Hindoos owe their early civilization. An immense population in those and the surrounding countries is now dependent on the rice crops; and when these fail, thousands perish of hunger.*

* The Chinese, who pay the greatest attention to the cultivation of rice, manure their lands with all sorts of filth, dung, &c.

In order to make the rice grow the better, they are careful, in certain places where they sow, to bury bolts of hogs' hair or any other sort of hair, which, according to them, gives strength and vigor to the land, and makes the rice better; those whose business it is to shave the head are very careful in saving the hair till the inhabitants of these parts come to purchase it for about a half-penny per pound, carrying it away in bags, and you may often see barks loaded with nothing else.

When the plant begins to ear, if the land be watered with spring water, they mix quicklime with it, pretending that it kills worms and insects, destroys weeds, and gives a warmth to the ground very much tending to make it fruitful. (a)

(c) Du Halde's History of China, (1741), p. 109.

BOTANICAL DESCRIPTION.

CLASS *Hexandra*; ORDER *Digynia*; NAT. ORDER *Gramina*.

Oryza Sativa—Native of Ethiopia—cultivated in tropical countries very abundantly,

"Account, geographical, statistical and historical, of Orissa proper, or Cuttack," a territory in India, lying on the river Hoogly and the sea. (b)

Rice is the great article of produce, and consequently of food, throughout Orissa proper. In the Pergunnahs, north of the Byterini, it is almost the sole object of agricultural labor. The grain is in general large and nutritious, but coarse, and is considered inferior to the average produce of Bengal and Behar.

The crops of Cuttack are called Sared and Beali. Of these, the first and principal one is sown in May and June, and reaped in from the middle of November to January, (a second crop rare.) The second in importance, called the Beali, is sown about the same time on the higher lands, and reaped from end of August to end of September.

Also an inferior description of rice, which is sown in low, marshy spots, at the opening of the cold weather, and by frequent transplantation and Irrigation is rendered fit for cutting in the following April. The cultivation of the latter sort, which is called Dalo, takes place chiefly in the Pergunnahs, between Khunda, the Chikla lake, and the sea.

"The Soomla, or Himalaya Paddy, or Mountain Rice, received from Mr. Hodgson, resident at Nepal, appears to be of the same kind as a sample (comprising five varieties) sent to the Society of Arts, in 1831, by Dr. Wallach. (c)

"The high rice is nearly of the same quality as the latter kind," (East India rice inferior), being dark-colored, opaque, and not at all calculated for the English market.

After being cut down, the *Malai* rice is stacked on the field and left to become heated and to ferment six or eight days, after which the stacks are pulled to pieces, and the grain separated from the straw by shaking the sheaf and beating it a few times on the ground, is winnowed by being shaken to the wind from a shallow platter made of mat and bamboo, and dried in the sun. The grain thus treated is called hukwa, and is much liked.

Another mode is to beat out the rice with a long stick as it lays upon the ground. All the grain in the valley is separated from the straw on the field, and carried home, after being winnowed, in bags and baskets. It is reaped with a sickle.

The *Cassa* is made thus: The rice in huak (dhan) being steeped in water for a day and night, is roasted for a short time on a stone or large tile heated for the purpose; when thus parboiled, and while still soft, it is thrown into the wooden mortar and bruised into thin flat cakes, in which state, having been separated from the husks and dried, it is sold in the shops and eaten by the people. A native of Nepal, or of Bengal and Behar, will be satisfied to live on this substance alone for many days together; a small quantity of *Sukr* (unpurified, partially crystallized sugar) added, gives it a most grateful relish to the rarely stimulated palates of these poor and primitive people.

Kuti, (*Newari*), the machine for converting the dhan into eatable rice, by husking it, is the same as that for making *Surki* from bricks, hence called the *Dhenki*. (d)

(b) "Asiatic Researches," or Transactions of the Asiatic Society in Bengal, pp. 15, 171.

(c) "Report of the London Society of Arts." Journal of the Asiatic Society for 1836, vol. v., pp. 366-368.

(d) "Report of the London Society of Arts." Journal of the Asiatic Society for 1836, vol. v. pp. 962, 963.

as well as in some of the warmer parts of Europe, in grounds for the most part artificially inundated. Annual—flowers in midsummer. Root fibrous; Herb grassy, about four or five feet high, light green, smooth; leaves linear, narrow, taper-pointed. *Stipula* long, abrupt, jagged, crowning the very long striated sheath. *Panicle* terminal, much branched, many flowered, nearly erect, slightly spreading; its branches angular, rough. *Flowers*, when closed, obovate, oblique, or most gibbous at one side; their corolla somewhat hairy,

minutely granulated or dotted. *Awn* straight, rough, various in length.

Rice: A plant cultivated in the East, in America, North and South; in Africa, Spain, Italy, and Piedmont. Its stalk not unlike that of wheat, but fuller of joints, and with leaves resembling those of the leek. It branches into several stems, at the top of which the grain grows in clusters, and each is terminated with a beard, and inclosed in a yellow rough husk. When stripped of this, the seed appears to be oval in shape, of a

Captain Charles Wilkes, of the U. S. Navy, the intelligent and able commander of the recent exploring expedition, informs me that, except at Manila, no specimens of rice were obtained by the expedition, the crops not being in a state to furnish specimens. He has obligingly furnished the following remarks: "In Brazil you have the result of Mr. Brackenridge's actual observation; he was horticulturist to the expedition. I may add that the rice of Brazil, as an article of commerce, is not esteemed in comparison with our best rice, and does not keep well; this is also the case with the rice of the Philippine Islands. Of the latter you have an account handed me for you by Mr. Rich, our botanist, which he obtained from the best authorities. Speaking well the Spanish language, he was enabled to obtain much information, and had much intercourse with several distinguished gentlemen of Manila, who are well acquainted with this branch of cultivation.

"Instead of the word *Paddy* being applied to Mountain Rice exclusively, as London has it, in the Philippine Islands and at Singapore they apply it to all rice with the husk on; this I found invariably their practice. The rice fields of the Philippine Islands, the Water rice, both before and after it is growing, yield a large supply of fish for the inhabitants; some, it is said, much over a pound in weight, and a foot in length! The only mode they have of cleaning the rice of the husk is to beat it in a wooden mortar by hand; this each family does for itself, it being sold as *Paddy*.

"All the aquatic kinds are planted in July and August by hand, and are reaped in December. The Upland rice comes much sooner to maturity, and is much esteemed, though they do not raise any great quantity.

"Near Singapore there are no rice fields yet, the country is better adapted for sugar; it is imported from Cochin China and China. We have had no opportunity of getting the information you desire, relative to the rice of Sumatra and Java. The specimens of rice obtained at Manila are small, and not in such a state as to be preserved for usefulness. Any description of those mentioned by Mr. Rich may be obtained from our Consul at Manila immediately after the crop is gathered; it will afford me pleasure to be instrumental in procuring such as you may desire."

In Brazil, (e) toward the base of the Organ Mountains, where the country is rich and flat, the cultivation of rice is carried on to a considerable extent. At one place, on the banks of a small river, we observed not less than seventy acres sown with rice.

The following, apparently, was the mode of cultivating it there: Dykes or dams, in breadth three or four feet, inclosed from two to three acres. These inclosures were either square or oblong, as suited the nature of the ground, which had been ploughed, made fine and level, with several furrows or runs through the centre of each, for the purpose of draining the surface. In the dykes were two or more gaps

(e) D. Brackenridge, horticulturist attached to the U. S. Exploring Expedition, under the command of Charles Wilkes, Esq. U. S. Navy.

or sluices, to flood or let off the water at will. The young rice plants, when we saw them, were from two to three inches high; the ground was moist to saturation, but not flooded. We were told that water would be let on in a few days, and allowed to remain till the plants were in flower. The soil was a deep, rich, black earth. This culture on the part of the Brasilians resembles very much that of the Westphalians.

Several patches of rice were seen at the Sandwich Islands, near Honolulu.

The varieties of rice cultivated at the Philippine Islands (f) are very numerous; the natives distinguish them by the size and shape of the grain. The following are some of the most esteemed varieties:

Binambang—With the leaves slightly hairy, glumes whitish, grows to the height of five feet, flowers in December. Aquatic.

Lamayo—Greatly resembles the above, is more extensively cultivated, particularly in Batangas, where it is the principal article of food among the inhabitants of the coast.

Malagequit—This variety derives its name from its becoming very glutinous after boiling; it is much used by the natives in making sweet and fancy dishes, but is considered unwholesome; it is also used in making a whitewash, (g) which is remarkable for its brilliancy and for withstanding rain, &c. Aquatic.

Bontot Cabayo—Common in Ilocos, where it is cultivated, both upland and in water. It produces a large grain, and is therefore much valued, but it has rather a rough taste.

Dumali—or early rice. This variety is raised in the uplands exclusively, and derives its name from ripening its grain three months from planting; the seed is rather broader and shorter than the other varieties; it is not extensively cultivated, as birds and insects are very destructive to it.

Quinanda—With smooth leaves. This variety is held in great estimation by the people of Batangas, as they say it swells more in boiling than any other variety. It is sown in May and gathered in October. Upland.

Bolohan—This variety has very hairy glumes; it is not held in much esteem by the natives, but is cultivated on account of its not being so liable to the attacks of insects and diseases as most of the other upland varieties.

Malagequit—Smooth leaves, glumes red; in all the above they are whitish. It possesses all the qualities of the aquatic variety of the same name, that of becoming very glutinous after boiling, &c. This rice is said to be a remedy for worms in horses, soaked in water with the husk on. It is given mixed with honey and water.

Tangi—Leaves slightly hairy, glumes light violet color. This upland variety is much esteemed for its fine flavor.

(f) Mr. Rich, the botanist attached to the U. S. Exploring Expedition, under the command of Charles Wilkes, Esq., U. S. Navy.

(g) Small rice is used in the lower parts of Carolina for making whitewash with lime, and with good effect.

shining white color, and almost transparent. One species, several varieties.

1. Common Rice: Stem four feet high—panicle spiked, simple—husk pale, oblong, with long awns or beard, a late sort; grows in moist places; injured by either drought or salt water.

2. Early Rice: Stem three feet high—panicle spiked—branched—husk tinged, brownish red—awns shorter; grows in marshy places; is not injured by salt inundations.

3. Mountain Rice: Stem three feet, more slender—husk longer, the awns very long; grows in dry situations; exposed to cold, exposed to continued inundation, it decays—sea water kills it.

4. Glutinous or Clammy Rice: Stem four feet high, leaves wider, yellowish—panicle large, with shorter awns—seed oblong, rather large, glutinous, very white; grows in both wet and dry places.

There is a variety having a black seed highly flavored, as well as another having red seed. Rice seems to contain more silex in its composition than most of its natural order. Even the seed is not destitute of this substance. Brilliant imitations of precious stones are said to have been made of rice, for which purpose a large quantity of the grain is required.*

ORYZA—from the Arabic *Eraz*.—In modern Europe, *Riz*, *Reis*, *Rice*.

Oryza sativa, the common rice, has the culm or stem from one to six feet in length; annual, erect, simple, round, jointed; leaves subulate-linear, reflex, embracing, not fleshy, flowers in a terminal panicle; calyces, leaflets lanceolate, valves of the corolla equal in length, the inner valve even, awnless; the outer twice as wide, four grooved, hispid, awned; style single, two parted.

Oryza mutica, the dry or mountain rice, cultivated in Ceylon, Java, and of late in Hungary, has the culm or stem three feet high, and more slender; fruit longish, with awns the longest of all. It is sown on mountains and in dry soil; rots with a long inundation, and perishes with sea water.

The varieties of rice, as of other cultivated grains, are as numerous as the different soils, climates, and other physical circumstances in which it is cultivated; besides the dry rice, the chief sorts, by some considered species, are the *O. præcox*, or early rice, and the *O. glutinosa*, or clammy rice, both cultivated in irrigated lands.

The native place of rice, like that of the other sorts of grain in common use, is unknown.

In the hilly parts of Java, and in many of the eastern islands, the mountain rice is planted upon the sides of hills, where no water but

rain can come; it is, however, planted in the beginning of the rainy season, and reaped in the beginning of the dry season. The natives call it *paddy gunung*, which signifies mountain rice. It is entirely unknown in the western parts of India, but it is well known in Cochin China, where it thrives in dry, light soils, mostly on the sides of hills not requiring more moisture than the usual rains and dews supply, neither of which are frequent at the season of its vegetation.

There is a kind of hill rice which is hardy enough to grow on the edge of the Himalayan snows; it is almost to be expected that this will, at some future time, prove an acquisition of value to the European cultivator.

In Lombardy and Savoy, rice is sown on rich lands, the sower often wading to the knees in the water; one crop a year only is obtained, but four crops are often taken in succession.

In Westphalia, and some other parts of the south of Germany, rice has long been cultivated; there it is sown on lands that admit of irrigation, but water is not admitted till the seed has germinated, and it is withdrawn, as in Italy, when the crop comes into flower. From long culture in a comparatively cold country, the German rice has acquired a remarkable degree of hardiness and adaptation to the climate, a circumstance which has frequently been alluded to as an encouragement to the acclimating of exotics. It is found, Dr. Walker remarks, that rice seeds direct from India will not ripen in Germany at all, and even that Italian or Spanish seeds are much less early and hardy than those ripened on the spot. In Hungary, rice has not been long cultivated; the mountain sort has chiefly been tried, and that in the manner of our barley or summer wheat.

In England a crop of rice has been obtained near Windsor, on the banks of the Thames.

By far the best imported rice is from Carolina; it is larger and better tasted than that of India, which is small, meagre, and the grains frequently broken.*

The varieties of rice which are most common with us in Carolina are:

1. The *Gold Seed Rice*, the ordinary crop rice most highly esteemed, and therefore universally cultivated; an oblong grain 3-8ths of an inch in length, slightly flattened on two sides, of a deep yellow or golden color, awn short; when the husk and inner coat are removed, the grain presents a beautiful pearly-white appearance—an ellipsoid in figure, and somewhat translucent. This rice has been introduced into the Winyaw and Waccamaw region since the revolution. It was planted by Col. Mayham, on Santee, in 1785.

2. The *Guinea Rice*, so called from its resemblance to one of the varieties of Guinea

* Rees' Cyclopædia.—Art. *Oryza*.

* London's Encyclopedia of Plants.—Art. *Oryza*.

corn, in the shape of the head and clustering of the grains. In color the same, or perhaps a little deeper; the grain of this variety is in shape both broader and shorter, but not thicker than No. 1. In figure, a sort of oblong spheroid, compressed on two opposite sides, so as to be nearly twice as broad as it is thick; awn short, blunt; it is not cultivated as a crop, and is rarely met with.

3. The *Common White Rice*, in shape and general description like No. 1, except that the color of the husk is white or cream-colored, and the grain when hulled is not as broad, nor as pearly; awn short. Some grains of this, mixed with a sample of seed rice, constitute an objection to it, although it is this variety that constituted the earlier crops of the country.

4. The *White-Bearded Rice*, very much the same as No. 3 in general characteristics. The grain of this kind is rather larger, and is furnished in its unhulled state with a very long awn or beard—grows well on high land. A sample of this last was brought from the East Indies in 1842, by Capt. Petigru, U. S. Navy. Some years ago it was cultivated more or less extensively by planters for their negroes.

There are several other kinds of rice in appearance, to be found in both the fields and the barn-yards, differing either in the size and shape of the grain, or in the size and appearance of the stem and leaflets. They are believed to be modifications of either one or other of the foregoing descriptions; none of these have as yet established a sufficient claim to be classed as distinct varieties.

They may be classed as

1. An improvement of the grain chiefly cultivated, arising from a long-continued, careful selection of seed, the vigorous nature of the soil in which it was successively planted, the peculiarities of the cultivation pursued consistently from year to year, and other circumstances. Of this character, it is believed, is the large grain rice so successfully produced by Colonel Ward.*

2. A commingling of the grain, arising from a careless selection, or a neglect of selection of seed—and two or more of the foregoing varieties being planted in the same field, or in closely adjoining fields—the farina of each fructifying some plants of the other, etc.

3. A corruption or deterioration of the grain, arising from utter neglect and exposure of the seed to the vicissitudes of weather from year to year, or the being covered so deep in either earth or water as not to have vegetated for years.

Of this last, the Volunteer Rice affords examples, viz.: the red grain having the same

exterior husk as No. 1, with perhaps the awn a little longer; the red grain having a white husk like No. 3; and the red grain having the husk white like the last, with a longer awn, and dropping from the stem in the field as soon as it is matured. This kind of volunteer never can be harvested on the stem; it is sometimes stripped into bags and baskets, and used as horse and poultry feed. In either case, whether the grain has dropped from being touched, or has been stripped off for use, the stem, relieved of its superincumbent weight, stands erect and towers above the worthier and well-freighted heads of the surrounding fields. Hence it is called, in the vernacular, "Proud Rice."

The cultivation of rice in Carolina has added materially to the wealth of the province, the colony, the state; and has enhanced in no inconsiderable degree the value of the active commerce of both the kingdom of Great Britain and the federal republic of the United States.

It is destined to add still further to the productive wealth of our country. The consumption of rice, it is believed, will continue steadily to increase in proportion as the various uses of this valuable grain shall be more generally ascertained, and rendered familiar in the useful and ornamental arts, as well as in its culinary preparations, as an ordinary vegetable, or a delicate luxury.*

* The following methods of preparing rice in the cuisine, though common with us, may not be found in all the manuals of housekeeping. They are deemed not unworthy of being noticed:

To boil Rice.—Pick all the specks and gravel from the rice, then wash it thoroughly in cold water; have your pot of water boiling, add salt, and then put the rice in and stir it while boiling; let it boil four minutes, then pour off the water as close as you can, without stirring the rice; set the pot on some coals and cover it; let it remain twenty minutes, then dish it up for use. Prepared thus, it is the most simple among vegetables, is palatable, nutritious and light. When boiled, rice is increased in bulk some 150 per cent., and in weight over 100 per cent. For dyspeptics there is no vegetable so innocent.

Rice Breakfast Bread.—Mix a spoonful of butter with some hot homony, very thoroughly, and spread it to cool; then beat up an egg very light, add some milk, then mix in the homony with rice flour (a) until it is a thick batter, add salt, *q. s.*, stir it well, then drop it from a spoon into an oven and bake quickly.—*Fans.*

Another Rice Bread.—Have a bucket for the special purpose; mix overnight some homony, or the eyes of the rice, boiled soft, with milk and rice flour, having added salt, *q. s.*, into a stiff batter, so that it will just pour; set it where it will not get warm.

(a) Rice flour is obtained by pounding into powder in a hand mortar the requisite quantity of milled rice. Two quarts of rice will make nearly three quarts of flour. This is the best way to prepare it for immediate use; if kept, it soon becomes acid. It is sometimes ground by the mills. This keeps very well, but the rice cannot be so completely pulverized when ground. It is prepared thus at the New-York steam rice mill, and packed in barrels for exportation.

* See Report of Committee on Rice to the State Agricultural Society of South Carolina, 1843, for Col. Ward's account of this grain.

* By this grain a large portion of the human race actually subsist, and it is believed it may be yet more universally consumed. It is a vegetable which undergoes no very material change, from change of climate. When put up for exportation, it deteriorates less than any other grain or breadstuff whatever, and when cleaned and brushed in the best manner, it will keep sufficiently sweet and sound during the longest voyage.

Indeed, rough rice, or rice in its primitive state, before the chaff or husk has been removed, may be kept fresh and sweet for years; even should it, for a moment, have been immersed in water, the sun's warm rays, and a little dry air, effectually preserve it for a long time. One hour is sufficient to reduce a bushel of rough rice (one half) to a state fit for cooking; and the only instrument requisite is simply a wooden mortar and pestle.

Professor Liebig, in a note to his admirable and valued work on Chemistry, as applied to agriculture and physiology, p. 98, furnishes a chemical analysis of rice, in terms substantially the same as those in which the same analysis by Braconnot is given by Berzelius. According to the analysis of Braconnot, *Ann. de Chim. et de Phys.* t. iv. p. 370, this grain is thus constituted:

	Carolina Rice.	Piedmont Rice.
Water.....	5.00	7.00
Starch.....	85.07	83.80
Perianthyma.....	4.80	4.80
Gluten.....	3.60	3.60
Uncrystallizable sugar....	0.29	0.05
Gummy matter approach- ing to starch.....	0.71	0.10
Oil.....	0.13	0.25
Phosphate of lime.....	0.13	0.40
	99.73	100.00

with traces of muriate of potash, phosphate of potash, acetic acid, sulphur, and lime, and potash united to a vegetable alkali.

which injures it; in the morning stir it, pour it into the pan, and set it to bake.—*Gallacant*, 41.

Griddies for Breakfast.—Mix a thin batter with milk and rice flour, adding salt, &c., have your grid-die-iron hot, grease it with lard, pour some batter on, spread it thin, turn it and brown it on both sides.

Rice Gels.—There is also a very good gine made from rice, by boiling the ground rice in soft water till it acquires the consistency of a thin jelly.—*Ency. Am.* This is one of the best cements for china-ware, shells, &c.

Starch from Rice.—This is said to be finer, whiter, and better, inasmuch as a given quantity will go farther than that produced from wheat. The manufacturers, however, allege that the material is too costly to justify their using it in making starch. Moreover, the difficulty of separating it from the gluten contained in this grain, is an obstacle in the way of its use. It is to be hoped that some of our chemists will yet discover a more ready and certain method of completing this process.

Vauquelin was unable to detect any saccharine matter in rice.—*Thomson's Organic Chemistry*, p. 883.

EARLY INTRODUCTION AND CULTURE.—As early as the year 1666, the facilities afforded by the character of the low country of Carolina for the cultivation of this seed, were remarked by agents of the English interested in the settlement and improvement of the new world.* In less than forty years from that time, the swamp seed was actually introduced and successfully cultivated in South Carolina.

It happened thus, by accident.† Landgrave Thomas Smith, or Smyth, as honest John Archdale wrote the name, on a visit to the East, before coming to this country, had observed the plant and some of the circumstances attending its culture. After settling in Carolina, it occurred to him that the low grounds and climate of the country were admirably adapted to this culture. Earnest in this opinion, and desirous of an opportunity to test its value by experience, Providence brought within his reach the only means necessary to do so; and thus by his instrumentality, bestowed upon a portion of the new world a great and permanent blessing. In the year 1694, after Landgrave Smith, dissatisfied with the province, had entertained thoughts of quitting it, a vessel from Madagascar, in distress, put into the harbor of Charleston, having on board a little rough rice, in the cook's bag. This rice was given to Mr. Smith, who planted it in a low, moist part of the garden, at his residence near White Point.‡ The plant grew luxuriantly, and the grain matured finely. The product was wisely and liberally disseminated as seed among the neighboring planters, who in their turn supplied other planters living more in the interior; and so on until this became the chief article of production, the staple commodity of the colony.

There is extant another account of the introduction of this valuable seed, which refers it to the year 1700§ or thereabout, and

* In "A Brief Description of the Province of Carolina on the coasts of Florida, etc., printed for Robert Horne, near Bishopsgate street, London, in 1666," (the charter of Carolina is dated the 30th of June, in the 17th year of the reign of Charles II.,) it is mentioned, among other things, that the marshes and meadows are very large, from 1,500 to 3,000 acres and upwards, and are excellent food for cattle, and will bear any grain being prepared: some cattle, both great and small, will live well all winter, and keep their fat without fodder. The meadows are very proper for rice, rapeseed, linseed, and many of them be made to overflow at pleasure with a small charge.—3 Car. Col. 13.

† Ramsay's History of South Carolina, chap. 3th.

‡ A spot now traversed by Longitude Lane.

§ In new land, well drained, under favorable circumstances, from one grain may be matured 24 ears or heads, carrying each from 10 to 380 grains. There is a tradition, that some forty years ago, a stalk of rice having 60 branches or tillers was seen at the old

associates with it the name of another gentleman, a Mr. Woodward.

It is further recorded* that a Mr. Dubois, Treasurer of the East India Company, did, some short time after, send out to this country a small bag of seed rice. Whether these were distinct and successive importations, which is highly probable, and whether or not there were two or more varieties of the grain introduced, certain it is, the seed was so rapidly dispersed along the rivers and inland swamps, that soon the province became a rice-growing country. And since, under different forms of government, as a colony of Great Britain, and as a sovereign state, constituting an integral part of the United States under a federal republican form of government, the principal staple production of South Carolina has been the best rice in the world.

At first, rice was cultivated on the high land, and on little spots of low ground, as they were met with here and there. These low grounds being found to agree better with the plant, the inland swamps were cleared for the purpose of extending the culture. In the process of time, as the fields became too grassy and stubborn, they were abandoned for new clearings; and so on, until at length was discovered the superior adaptation of the tide-lands, and the great facilities for irrigation afforded by their location. For these, the inland plantations were gradually and slowly abandoned, until now, that the great body of land which little more than a century ago furnished for exportation over 50,000 barrels of rice, now lies utterly waste, constituting, where trees have not overgrown it, the finest natural pasture that could be desired.

As may very well be supposed, the seed was, at first, very sparingly sown, and the ground, being new, furnished an immense yield in return.

A peck of seed to the acre, sown thin in drills, eighteen inches apart, would, on good land, yield thirty, forty, fifty, and even sixty bushels, in proportion to the care bestowed on its culture.

As the grain became more plenty and common, and the space between the drills was slightly diminished, the quantity of seed was by little and little increased.

It is now from two to three bushels per acre, varying according to the character and condition of the land, and the peculiar notions of watering entertained by the planter—a free use of water justifying, and indeed requiring, a liberal allowance of seed.

The space between the drills now, from

centre to centre, is thirteen, fourteen, or fifteen inches—the best distance is thirteen inches, where water is used freely; the dry culture requires a more frequent use of the hoe, and therefore the larger space is preferable.

The average product of rice land at present varies from twenty-five to sixty bushels per acre, generally increasing in quantity, though deteriorated in quality, in an inverse ratio to latitude.*

The seed should be selected with the greatest attention to purity and maturity of the grain. A sample containing one red grain in one hundred grains, is considered by the best planters inferior. Seed rice, having a greater proportion of red or volunteer rice than one per cent., is totally unfit for planting. To procure the most mature rice for seed, a good plan is to thresh the rice over a barrel or large log, the butt of the sheaf being held by both hands. In this way the riper grains alone are whipped off, serving as seed; while the remainder on the sheaf is threshed off in the usual way.

Product.—Within seventy degrees of latitude, radiating from the equator, this valuable grain is cultivated all over the globe; even in the Himalaya mountains there is said to be a variety naturalized and grown;† another, or possibly the same, in Siberia. From climate and peculiar treatment, the vegetable rice acquires a certain constitution, adapting itself to the habitude of the region in which it grows; it does not so readily succeed elsewhere, until it is acclimated by time. Grown in India, in China, in most of the Asiatic islands, in southern Europe, in Africa, in South and North America, each country yields its own peculiar seed.

In North America, although there is known on the margins of some of the northern lakes a kind of wild rice, which, when that country was in a state of nature, furnished no little subsistence to the aborigines, yet it is scarcely cultivated north of the state of Virginia. The census of 1840 exhibits the following scale of production in the United States:

Taking the crop of 1839 as a basis—

Missouri produced	65 lbs. rice.
Illinois "	598 "
Virginia "	3,084 "
Arkansas "	5,987 "
Tennessee "	8,455 "
Kentucky "	16,848 "
Alabama "	156,469 "

* The higher the latitude, generally, the better the rice in quality; hence planters look to the northward of their own locality for their seed rice, when it can be obtained thence comparatively free of volunteer.

† Ency. Am.

butcher-pen, near Georgetown. There was grown the past year, in the garden of Dr. E. T. Heriot, a plan from one grain having 70 branches.

* 2 Carolina Col. p. 370.

Florida Ter'y produced	495,625 lbs. rice.
Mississippi	" 861,711 "
North Carolina	" 3,324,132 "
Louisiana	" 3,765,541 "
Georgia	" 13,417,209 "
South Carolina	" 66,897,244 "

As it is only in tide-water swamps that this grain can be cultivated to advantage, and therefore only in such lands that the culture will probably be extended, the system of culture pursued on the tide-lands of Carolina only will be detailed.

The swamp and marsh lands in this region, when in a state of nature, were overflowed by the tides in ordinary times. In the time of spring tides, they might have been found covered at high water to the depth of from twelve to twenty inches. When reclaimed they are furnished with a sufficient dam to exclude the tide-water, and a trunk, or framed culvert, furnished with a door at each end swinging upon long levers, which are attached to sturdy uprights, so as to admit or exclude the tide at pleasure—retain or discharge it, after being admitted. The large inclosure is subdivided by cross-banks, or dams, into fields of convenient size, containing variously from fourteen to twenty-two acres. In constructing the banks, large ditches, five to eight feet wide, are excavated to the depth of five feet, leaving between the ditch and bank a margin of twelve feet or more. These serve to drain the field. From one of these ditches to another, in one direction, and at the distance of $37\frac{1}{2}$ to 50 feet apart, are cut smaller ditches or drains, eighteen inches wide, and three feet deep. Thus thoroughly reclaimed, and completely drained, the swamp, if well seeded, will produce abundantly from the first. The following remarks, however, will be understood as applying to old land, from the surface of which stumps and marsh have entirely, or for the most part, disappeared. In this condition are now found most of the lands in the rice-growing region. Fields, as they become exhausted by long-continued cropping, are revived by manuring with rice straw and tailings, or by turning under the spontaneous growth of a dry fallow for one or more years.*

* Southern Agriculturist, N. S., vol. iii. p. 243.

Mount Arena, Nov. 8, 1843.

COL. R. F. W. ALLSTON :

Your queries respecting the varieties of rice, &c., remind me of my promise to give you the result of some of my experiments with rice straw and tailings, as manure to rice land. Whenever they have been put upon my fields which had been making small crops, the effect has been satisfactory, and it has become a part of the system of my plantation.

In the month of November, 1839, I caused the stubble of two fields, one fifteen, the other ten acres, to be listed four feet apart, and parallel with the

Preparation—The land is ploughed, or dug with the hoe, as early in the winter as can be; if before Christmas, the stubble is turn-

drains; after which a furrow was made on each side with a large plough; the land unbroken in the centre was then drawn upon the beds with hoes; during the time of threshing, the straw and tailings were carried in a large flak, and each load was distributed between the beds of one acre, until the whole was covered. In this state they were left until the last week in June, when all the volunteer rice and grass was hoed down, and the beds reversed with ploughs and completed with hoes. The ditches and drains were then cleaned, and the fields were planted in peas, set in chops about a foot apart; the land was in good order, and the peas grew luxuriantly, and made a fine crop; no volunteer rice, and as little grass as possible was allowed to go to seed.

In the first week of April, the vines were cut down, and the beds levelled with ploughs and hoes. This was very easily done, as the land was dry and remarkably loose. They were then trenched in the usual way thirteen inches from centre to centre—two bushels and twelve quarts of rice were planted to each acre, and the seed was well covered with earth. During the cultivation, the common plan was pursued, i. e. sprout, point, long, and lay-by flow—two hoeings between point and long flow, two after, and one picking in the water. The crop was well saved, and produced within a fraction of seventy-three bushels to the acre. The straw and chaff of this rice was of a much brighter color than any other made upon the plantation, and the grain was of superior quality. 1970 bushels of rough rice, made from land treated in the manner described, was pounded at the Georgetown steam mill last winter, and turned out—

Tierces, 609 lbs. net.

96,157 lbs. prime rice,
5 barrels middling, and
8 ditto small, with
193 ditto flour.

I cannot say what had been made upon these fields for the three or four previous years, but on reference to the plantation book, where an account had been kept, I found the average crop from them to have been thirty-three bushels and a fraction to the acre.

In some of my fields I have planted oats upon the beds, one and sometimes two rows, and these have, in some instances, been followed by potato slips, which succeed remarkably well, and, it may be worthy of notice, keep fully as well, if not better than those made upon high land.

Although the rice thus made received as much work as is usually bestowed under the best cultivation, yet it was not bestowed from its seeming to require it, but from the fact of its being convenient to do so, in turn with other fields of the plantation. I believe as much might have been made with two workings, as the grass had been so completely destroyed, and the land so thoroughly opened previously, that but little remained to be effected by the hoe. From subsequent observation, this land is much more easily cultivated, and with proper care some years must elapse before the volunteer rice and various grasses regain their standing.

Which of the three means employed in this plan is of the most importance, is to be determined—thoroughly breaking the soil, with the destruction of volunteer rice and grass seed, change of crop and culture, or the application of the rice-straw.

The work laid out in this manner ought not to be considered as altogether additional, but very much as given in advance, and at a time well suited to it—as when the rice planting season arrives, it will be found, as before remarked, to require very little more—after which its state of preparation for a good crop will far exceed any condition that could be brought about by the means at command during the winter season.

From the observations which I have made since my attention was first drawn to this matter, it ap-

ed under—if later, the stubble is burned off. The land is then covered with water during any warm changes of weather in winter, and exposed to the frost when it is colder. In March the field is kept dry, the drains are cleaned, the upturned clods are broken, and the whole levelled with the harrow or hoe. The field is trenched in a direction across the drains, with a hoe made for the purpose, to open a trench of from 8 to 5 inches in width. The trenches or seed-furrows will be 13, 14, or 15 inches apart from centre to centre. In April, and until the middle of May, the rice is sown in these trenches, say 2½ bushels of seed to the acre of 45,000 square feet.

Dry Culture.—The seed is covered lightly with a light board attached to a hoe-handle, and the field is inundated from 4 to 6 days, just long enough to swell the grain, and prepare it to sprout. As soon as it is sprouted, and the plants become perceptible, like so many needle-points above ground, the water is again put on for 4 or 6 days, according to the warmth of the atmosphere.

With water cover.—The more common practice now, in the neighborhood of the writer, is not to cover the seed with earth, but to “clay”* it first, and after sowing, to

flood the land forthwith, making the “sprout” and “point” water one and the same. The method first mentioned is the best for early planting, though the labor required is greater. After the season is sufficiently advanced for the grain to germinate quickly, the “open” planting, less laborious, is equally certain, and by some persons is considered more certain to procure a regular and even stand. In all his early planting, that is, until the middle of April, the writer allows three bushels of “clayed” seed to the acre. His trenches are fourteen inches apart from centre to centre, and five inches wide—the seed is scattered in the trench. He uses the water freely.

When the plant is five or six weeks old, the earth is stirred with the hoe; in ten days more the hoe is again used, and the “long water” put on for two weeks or thereabout; deep the first four days, then gradually diminished, until the plant, somewhat recovered from the exhaustion occasioned by its rapid growth under water, stands up erect, and begins to throw out a new root; the water is then drawn. About eight days after, when the field is quite dry, a very deep hoeing is given, and the plant left undisturbed until it is prepared to form a joint; so soon as this is apparent, the field receives a light dressing with the narrowest hoe, and is “laid by,” that is, the “joint water” is put on to remain until the grain is matured, which is usually two months from this time. A few days before cutting, the water is run off, and the ditches washed out by the succeeding tide. The rice is cut with a sickle, (task, one quarter of an acre to the hand, to cut and carry,) and laid carefully across the stubble to cure, till the succeeding day. The dew off, it is then bound in sheaves of convenient size, just as wheat is, and packed in large floats, bearing five to seven acres, to be conveyed to the barn-yard. There it is stacked temporarily in small racks, and when thoroughly cured, put away in large stacks made to contain from 200 to 400 bushels each when threshed.

The threshing is performed, almost universally, by a labor-saving machine; and the grain is cleaned and prepared for market by means of the pounding-mill.

Water Culture; or “sixty days system.”—

pears that it would be profitable for such persons as plant weak or impoverished land, to subject one fifth of the quantity annually planted to this mode of treatment. From the increase which might be obtained in the first crop, a considerable return, if not all, would be made for the loss of a rice-crop on the land for one year, and the balance, if any, would be soon made up by the succeeding crops—besides the advantage gained from the increased fertility of the fields for some years, the enhanced value of their production from the superior quality of the grain, and the diminished labor during the cultivation of the succeeding crops.

Impoverished rice land is particularly susceptible of improvement from manure, as may be often seen when fields are so situated as to receive the washings, by rain, of adjacent corn or potato fields annually manured with rice straw; and it is more lasting in its effect than might be supposed, as is proved by the marked difference in rice growing in fields where cattle-pens or feeding-troughs had been placed, often many years before. With great regard,

EDWARD T. HERIOT.

* The process of “claying” rice was introduced somewhere about the year 1826, by that judicious, practical man, and observant, experienced planter, Captain John H. Allston, of Prince George, Winyaw. It may be thus described: Take two large tubs, say the two halves of a hoghead; fill one with water three fourths full, add to it three or four baskets or more of good red clay; stir it well until the clay is dissolved and the water has taken up a sufficiency of it to feel clammy between the fingers. Pour off this water into the other tub, into which also measure as much seed rice as the tub will hold without wasting; stir it about until every grain has been wetted by the clayed water, taking care to pause every now and then for the purpose of skimming off the grass seed and light rice, which rise to the top and float on the surface. Then dip out the seed rice in sieves, allowing the water to drip back into the tub, and spread it in the barn to dry for the next day’s sowing. Put more seed into the tub, and, when requisite, a fresh supply of clayed water, prepared as before, and so on.

The advantage of this preparation is that the grain, furnished on its exterior husk with a hairy furze, retains about it (after being dried sufficiently to be handled in the sowing) particles of the tenacious clay; this, on the grain in the trenches being reached by the water with which the field is flooded immediately after sowing, makes it adhere to the earth, and of course prevents the seed from floating.

* Reduced to a system by Mr. Archibald Liggett, of Winyaw, who has politely furnished this synopsis. Mr. L. thinks, and very properly, that the practice of making rice with water altogether is a vicious one, and should be resorted to only where the land is in such bad order, that the labor of planting would not be compensated by any other.

The land is flowed soon after harvest, for the purpose of sprouting the volunteer and scattered rice, until the winter sets in; it is then dried and kept dry. As early as practicable, the stubble is burned off. The ditches and drains are well cleansed at convenient times, and the land is turned late—a short time previous to planting. After this the preparation is as usual—the trenches are fourteen inches* apart from centre to centre, and are opened four inches wide. The seed, after being “clayed,” is scattered in the trenches, allowing two bushels and twelve quarts to the acre. The water is put on so as to cover all the hills, and kept so until the sprout of the rice is green, and the blade well opened; or until the rice begins to float. The water is then slacked down, until the tops of the plants show out on the level land, not regarding the low places. At this level it is held until the low places come out; it is then raised gradually every three or four days, until about six inches deep on the level parts of the field; at this it is held—observing to freshen the water every other night. As soon as the plant is sufficiently strong, the water is slacked down quite low, the hoe is dragged through between the trenches, and the hands pick out the long grass, weeds, and rushes. The water is then forthwith returned up to the same mark as before. This working should be given about ten days before drying the field, as, soon after it is done, the plant puts out new roots, by which it is sustained and prevented from “checking” when the water is drawn. In drawing this water, the condition of the plant must guide the judgment. In ordinary seasons, the first planting may be dried in forty-five or sixty days, the last planting in forty to fifty days, whenever about that period the plant is putting out a new root, and always early enough to allow it thirty days’ dry growth at least before forming the second joint. Seven days after the water is drawn, the field is hoed very deep, and, if the land is stiff, the sods are turned over, or it is “back-sodded;” in a fortnight after, it is hoed again, if practicable. As soon as the plant has formed a second joint, and the hollow is perceptible, the last, or “joint-water” is put on to the same depth as before, and never raised until the rice begins to shoot forth the ear.†

* Various distances, from twelve to sixteen inches, have been tried by Mr. L., and he has decided upon fourteen inches as the best. The writer’s experience confirms this decision.

† The following note is found in 2d Vol. Ramsay’s Hist. of S. Carolina, p. 206:

“South Carolina is indebted to Gideon Dupont, of St. James, Goose Creek, for the water culture of rice; he was an experienced planter, of discernment and sound judgment, who after repeated trials ascertained its practicability.

“In the year 1783, he petitioned the legislature of the state on the subject. A committee of five was appointed to confer with him. To them he freely

communicated his method, relying upon the generosity of the public. The state treasury being then empty, the committee could only recommend granting him a patent. This he declined. His method is now in general use in river swamp lands, and has been the means of enriching thousands, though to this day his own family have reaped no benefit whatever from the communication of his discovery. Thomas Bee, now Federal Judge for the district of South Carolina, was one of the above committee; and on his authority these particulars are stated.”

The price of rice for the same time averaged as follows:

In 1880.....	\$2 5-8
In 1831.....	2 3-8
In 1832.....	2 13-16
In 1833.....	2 5-8
In 1834.....	3 3-16

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The last summer I instituted an inquiry to ascertain whether any of the family of Gideon Dupont were living, and could furnish me with an account of the water culture alluded to as the result of their ancestor’s experience and observation. The inquiry was fruitless; none of the family of Gideon Dupont could be traced in this state.

I noticed the memorandum of the historian no further until coming to Columbia. Here, through the kind attention of the Clerk of the House, I have obtained from the journals of the House of 1784, not only a confirmation of the fact that a committee was appointed to consider the subject, but also the report of the committee inclosed, of which the following is a copy:

“In the Senate, March 18th, 1784.

The committee to whom Mr. Gideon Dupont’s petition was referred,

REPORT:

That they have considered the same, and are of opinion that every encouragement ought to be held out for the improvement in agriculture, and the staple commodities of this state.

Mr. Dupont intends to make two experiments the ensuing crop to prove the practicability of his undertaking, viz., one in River Swamp, at the plantation of Colonel Morton Wilkinson, and the other in Black Swamp, at the plantation of Mr. John Deas.

Your committee therefore recommend that Colonel Morton Wilkinson, Roger P. Saunders, Esq., and Mr. John Deas, be appointed commissioners to attend the said experiments, and if they should be carried into effect, and will be of general utility, and shall certify the same under their hands and seals, to the General Assembly, that then the said Mr. Dupont be entitled to a liberal reward.”

From the journals of the succeeding year, it does not appear that this commission ever reported on the subject. It may be presumed that Mr. Dupont’s method of cultivating rice without the use of the hoe, and with water only, did not, upon further test, prove to be of as great general utility as he himself supposed. In new land, just cleared of wood and drained, a good crop of rice can be made the first year without the use of the hoe; (a) but under no other circumstances that I am aware of, except, perhaps, after a good fallow, which, if properly treated, restores the soil almost to its primitive purity.

(a) The writer has made such crops repeatedly, between the years 1828 and 1836, when clearing new land, with a comparatively small laboring force.

In 1835.....	3 1-4
In 1836.....	3 7-16
In 1837.....	3 11-16
In 1838.....	4 1-17
In 1839.....	2 1-2

being an average for that time of \$3 1-8.

During the past season, 1842, the price was low, owing partly to the want of demand for rough rice, which caused an undue quantity of clean rice to be forced upon the market at the same time—partly to the increased production arising from a favorable harvest, but principally to the low price of breadstuffs generally, and the depressed state of trade all over the world, and the low standard value affixed to almost every thing, by a return to a bank issue, based upon a specie currency—the only safe and permanent basis.

To those planters somewhat in debt, who have been met in the full career of habitual expenditure, by the late and present low prices of produce, they have proved seriously embarrassing.

Low prices, if they continue permanent, so as to effect a corresponding graduation in price of all the usual objects of expenditure, are doubtless favorable to the lasting prosperity of the country. If this be true, our planters will not complain. The sooner they and their society can accommodate themselves to the new condition of things, that is, buy less, and endeavor to make more for sale, the sooner will those whose business it is to supply them graduate their prices to the reduced standard; and their renewed prosperity, if it be less sudden and ostentatious, will not be the less sure and permanent for that, nor the less gratefully acknowledged.

Drill Plough.—Somewhere about the year 1812, the late Dr. Robert Nesbit, returning from a visit to his native country, Scotland, introduced an implement in the economy of rice-planting which excited no little interest among the planters in his neighborhood. It was called the Drill Plough. Its offices and uses were to open the trenches and deposit the seed, which it was found to do very well when managed with care, to the saving of so much labor.

The drill plough was borne by a carriage on two wheels, very much resembling in size and height an ordinary dray, and was drawn by one horse between shafts. It consisted, generally, of a long box parallel with the axle and above it, into which the given quantity of seed grain was placed and locked up. From this box the grain was distributed by means of regulators into and through tin tubes, descending nearly to the earth, at the required distance from each other for planting. These tubes or cylinders were guided in their descent, and sustained in their respective positions, by rods of iron fixed firmly into the frame, but so as to yield to an obstacle when

pressed hard against. The rods on their part were each furnished at bottom with a sort of shoe, protruding a little beyond the tube for the purpose of marking and opening the trench into which the seed was to be conveyed by its corresponding tube. Although a little too complicated, it was, upon the whole, a complete and interesting labor-saving machine. Drawn by a good horse, over ground in high tilth, and managed by a skilful and judicious hand, the drill plough would trench seed from eight to twelve acres of ground in the day, in proportion nearly as it was furnished with a less or greater number of trenching shoes and tubes. It was used successfully by the importer, and, more or less, by several planters on the Waccamaw and Pee Dee, up to the year of his death, (1821,) since which time it has been entirely abandoned. This result is supposed to be owing, not to the fact that the plough was not found to be highly useful, so much as to this, that to use it successfully, it required more minute attention and judgment than could be calculated on among the field laborers of that day. The writer is inclined to the opinion that the drill plough will again be introduced, and successfully used in rice planting.* Indeed, he has himself ordered the importation of an improved one from Scotland, to be accompanied by a laborer who is familiar with its use. One of these ploughs, used by the importer, having four tubes, would, on long beds, trench and sow ten acres in a day. Another, furnished with six tubes, could accomplish fifteen acres under like circumstances, in the same time.

A simple trenching plough, furnished with coulters for opening two or three trenches at a time, has been used with advantage on light soils, but it has not been generally adopted.

Thrashing Mill.—The same gentleman, Dr. Nesbit, who was as much distinguished by his general intelligence and scientific ingenuity as he was noted for skill and success in the practice of his profession, imported and used upon his plantation, in the year 1811, the Scotch thrashing mill. His motive power was the wind. When the wind was fresh and the weather fair, this machine would thrash and winnow five hundred bushels in a day.

Among the various attempts of the several inventors in this country to improve upon the wheat thrasher so as to make it available for rice, none met with permanent success until the year 1830, when was produced a machine, the beaters of which were shod with sheet iron, and serrated with iron wire.

The principle to which is owing the superi-

* Since writing the above, it is ascertained that Mr. Francis M. Weston, of Waccamaw, who has just returned from England, has ordered for importation an improved drill plough, which, on his arrival in this country, will be left some time at the Agricultural Repository of J. D. Legare, for the inspection of planters.

city of this invention, is that, while revolving with increased rapidity, (600 to 800 the minute), by means of the teeth with which the beaters are furnished it combs off the grain from the numerous footstalks of which the ear of rice is composed. The invention, which is now in very general use, yielding, when worked by animal power, from two to three hundred bushels per day, and when propelled by steam, 450 to 700 bushels each, is due to the ingenuity and mechanism of Calvin Emmons, of New-York.* To the liberal

* The following is a list of patents obtained by citizens of South Carolina, together with the Emmons of New-York, for their respective inventions or improvements of a *Thrashing Machine*. There are no models for these to be found, and only three are illustrated by drawings. The originals were doubtless destroyed by the fire of the 15th December, 1836; and those marked thus † have not been restored:

† Benjamin S. Hort, George-	town, S. C.	patent 21st Feb., 1812
† Elias B. Hort, Charleston, S. C.	"	18th " 1828
† Calvin Emmons, New-York...	"	17th April, 1828
† Jehiel Butts, Georgetown, S. C.	"	30th May, 1836
Calvin Emmons	"	27th July, 1839
William Emmons	"	7th Feb., 1831
W. Mathews, Charleston, S. C.	"	27th Aug., 1833

Here follows a description, by Mr. Emmons, of his machine of 1831, with his improvements thereon:
New-York, 16th Sept., 1843.

To R. F. W. ALLSTON, Esq.

DEAR SIR:—Your letter of the 3d August is received. My rice-thresher, when I first introduced it into your state in the winter of 1830-31, was constructed as follows, viz.: a rectangular frame, across and near the one end of which was placed, in suitable boxes, an iron shaft, on which shaft were hung circular heads, or wheels, to the periphery of which circular heads, and parallel with the said shaft, were attached, by joints or hinges, six-toothed beaters, the length of which beaters being nearly equal to the width of the frame in the clear. The teeth of every second beater ranging alternately with the spaces between the teeth of the others; the teeth were made of 5-16ths iron rod, one and a half inches long, and set in the beaters 5-8ths of an inch apart from centre to centre of each tooth. This centrifugal force causing the said toothed beaters, when revolving, to extend themselves as far from the axis as the joints by which they are secured will permit, and thus when in motion forming a cylinder.

Underneath the beaters was placed a circular frame or bed, formed of slats parallel with the axis of the cylinder, the front edge of which frame, where the grain is received, being raised nearly to the height of the axis of the cylinder; directly in front of which is placed a pair of *fe ding rollers*, to which the sheaf-rice was conveyed by a revolving feeding-apron, the bands of the sheaves being previously cut.

The required speed of a cylinder of 18 inches diameter was found to be about 700 to 800 revolutions per minute—much over that speed would break the rice, or much under would not thrash so perfectly clean. They feed at about 60 feet per minute.

The principal improvements and alterations which I subsequently adopted, are the using of cast-steel teeth two inches long, of 3-8ths rod, flattened and hardened at the outer ends, (iron teeth having too rapidly worn away by the action of the rice upon them,) and steel plates in the concave bed, which plates project 3-4ths of an inch above the surface of the bed and incline towards the feeding rollers, about 30 degrees from the radius; and which I found to protect the bed from too rapidly wearing as before, and to aid in separating the foot stalk.

Also, as the feeding apron was found to wear out

enterprise and public spirit of General James Hamilton are the planters of rice indebted for the first thorough test of the powers of this machine, and for the subsequent early notoriety of its successful operation.*

Milling.—Although it is recorded that planters early in the 18th century cleaned their rice by mills worked by horses or oxen, yet this could not have been the case generally, till about the middle of that century. Even toward the period of the war, hand-mortars were still extensively used.

The method was, that each male laborer had three pecks of rough rice in a mortar, and each female two pecks, to pound before day or sunrise; and the same at night, after finishing the ordinary task in the field. The pounding was done in wooden mortars, made of the common pitch pine, to contain a bushel or less; the pestle was made of light-wood, or the heart of pine seasoned; the process was conducted on the floor of a large barn prepared for the purpose. The rough rice was sometimes ground by being passed between wooden blocks twenty inches in diameter by six inches thick, worked by hand. The mills early in use, and propelled by animal power, were the pecker-machine, so called from the striking resemblance of the pestle when in action to the bill of the wood-pecker, and the cog-mill, both of which have been entirely superseded by the improved pounding mill, propelled by water or steam.

Between the years 1780 and 1790, the first water-mill was erected by Mr. Lucas, the elder, to whom solely the credit of the invention is understood to be due.

It is to be regretted that the family of Mr. Lucas have not favored us with more full and accurate notes of their ancestor's early ingenuity and skill as a millwright. His son

too rapidly by the roughness of the rice, an inclined feeding-board was substituted.

By steam power the machines have each thrashed 700 bushels per day, though ordinarily from 450 to 500 bushels per day each, and by horse power, as you well know, much less.

I was first induced to introduce the machine in the rice-planting districts, by the urgent solicitation of General James Hamilton, who had seen a model or hand machine an agent of mine had in Savannah, Georgia, and which General Hamilton had taken over to his plantation near that city, and with the operation of which he was so well pleased that he at once sent me a bale of rice in the sheaf, that I might further experiment with it here; and wrote me, offering every facility for trying the experiment by animal power on his plantation, if I would bring out a machine and driving gear the following fall or winter, to which I acceded; and after the erection of which machine, General Hamilton invited the neighboring planters to witness the experiment, the result of which proved satisfactory. My patent is dated 27th July, 1829.

Very respectfully yours,
CALVIN EMMONS,
86 White street, New-York.

* See in the Drawing Department of the United States Patent Office an illustration of Mr. Emmons' patent, dated 27th of July, 1829.

Jonathan, inheriting the father's mechanical turn and skill, constructed on Cooper river, in 1801, the first toll-mill for cleaning rice. He yielded at length to the invitations of the British government, and transported his improvements to England, where he himself passed the remainder of his days. His son, Jonathan, now living, shipped in 1823 the first load of rough rice which was exported from this country.

The first water-mill built by Mr. Lucas was in the year 1787, for Mr. Bowman, on a reserve at his Peach Island plantation, on the river Santee. The next, on the same river, was on the reserve at Washo plantation, for Mrs. Middleton, afterwards Mrs. General T. Pinckney.

About the same time, or soon after, a water-mill was put up on a reserve on Winyaw bay, for General Peter Horry. Also for Colonel William Allston, on the reserve at his Fairfield plantation on the river Waccamaw.

In the year 1791-2, Mr. Lucas built on Santee the first tide-mill, for Mr. Andrew Johnston, on his plantation called Millbrook.

In a year or two after, the same indefatigable and ingenious mechanic erected on Cooper river an improved tide-mill, being furnished with rolling screen, elevators, packers, &c., at the plantation of Mr. Henry Laurens, called Mepkin.*

* The first toll-mill built in this country was "Middleburg Mill," on Cooper river, which was finished in 1801, by J. Lucas, the son.

The first Brushing Screen used was put into that mill in 1803.

The patent granted Mr. Jonathan Lucas by the British Government expired three or four years ago. One of the most important advantages secured to Mr. Lucas, was getting the duty on paddy reduced in England to 2s. 6d. per bushel.

Steam was first applied to rice-mills in the year 1817, by Mr. Lucas and Mr. Norton.

The first cargo of paddy was shipped to England in 1823, by J. Lucas, jun. In that year, the export of rice from this state was equal to 90,000 barrels, while in 1843 it had reached 180,000 barrels.

Among the numerous patents recorded at Washington for hulling grain, wheat and rice, the following are noted as being associated with the names of citizens of South Carolina, viz.:

Winnowing Screen Pendulum—Lewis Dupre, South Carolina, 1st April, 1807.

Hulling and cleaning rice—Jonathan Lucas, jun., 12th July, 1808.

Hulling and pounding husks—Jacob Read, S. C., 9th June, 1809.

Hulling rice and polishing—Jonathan Lucas, jun., 6th November, 1819.

Hulling rice by steam—John L. Norton, 16th December, 1823.

Hulling rice—John Ravenel, 17th May, 1828.

Hulling rice—Asa Nourse, South Carolina, 19th July, 1822.

Hulling rice—Asa Nourse, South Carolina, 3d April, 1829.

Hulling rice and separating grain—Peter Broughton, South Carolina, 5th August, 1831.

The models and plans illustrating these inventions respectively, were doubtless destroyed by the fire of 1836, and have not been since restored.

There is a mill on Savannah river, (Mr. Gibbon's,) carrying eleven pestles, which, as I learned from him—

Upon these, the mills erected at a later day have been improvements in construction chiefly. Some substantial improvements are said to have been introduced recently by David Kidd, a machinist from Scotland, of very high character for ingenuity and practical ability. He is himself one of the best millers, practically, in the state.

In the preparation of rice, much depends upon the grinding of the rough. In Northumberland, England, are the best quarries of stone for this purpose. In this process, as in that of brushing and polishing the grain after pounding, there has been latterly a decided improvement, owing mainly to the observation and genius of the millwright just named.

At present almost every planter of four hundred acres and upward, is provided with a tide-water or steam-pounding mill for preparing his own crops for market.

There are also a number of toll-mills in the state, nearly sufficient for preparing all the rough rice which is not pounded at the plantations.

In Georgetown, beside various tide-mills on the neighboring plantations, which pound on toll more or less, there is a very good steam-mill owned by Mr. Benjamin King.

To 3,000 bushels of fair rough rice this mill will yield of prime rice for market.....	144½ barrels.
Of middling.....	7 "
Of small rice.....	6 "
Of flour.....	320 bushels.*

self, can pound fourteen barrels the tide. The pestles are shod with cast iron about one foot in length, and secured to the wood by a long bolt driven from the bottom, and fastened by a screw and nut. The mortars are of cast iron, weighing 600 lbs., cast by Allaire, of New-York, and cost \$30. They are constructed to contain five bushels of rough.

* Georgetown, Nov. 16th, 1843.

To COL. R. F. W. ALLSTON:

SIR:—I have received your communication, requesting information in relation to the preparation of rough rice for market, and have to say, that three thousand bushels, fair quality, have turned out at the steam rice-mill here, one hundred and forty-four and a half barrels prime rice, and seven barrels middling, and six barrels small rice, and three hundred and twenty bushels flour. The time of pounding, with twenty pestles, sixty hours.

I would remark, that rice thrashed on floors with flails turns out much better than mill thrashed.

Your obedient servant,

BENJAMIN KING.

Charleston, 21st Nov., 1843.

To COL. R. F. W. ALLSTON:

DEAR SIR:—In reply to your favor of 14th ult., I beg to say that the following is, to the best of my belief, an accurate statement of the turn out from my mill of 3,000 bushels of what I consider prime rough rice.

To your first inquiry—

1. In what time will this quantity be preparing? One day.
2. How many tierces weighing 600 lbs. net? 106.
3. How many of second quality? None.
4. How many of middling rice? Two barrels.

In Charleston and its vicinity there are numerous tide-mills and several steam-mills; the chief and most successful of the latter

5. How many bushels of small rice? Twenty bushels.

6. How many bushels of rice flour? Two hundred and fifty.

With great respect,

I remain your ob't servant,

A. W. CHISOLM.

P. 8.—The above statement is made from rough rice thrashed with the flail. Rice done by a thrashing mill would take from one bushel to one and a half more, owing to the quantity of straw and foot stalk not being taken out properly before sent to the mill.

A. W. C.

Results of three different parcels pounded at Chisolm's Mill, 1843.

1. 3,000 bushels of rough rice from Waccamaw, thrashed by mill, made
142 barrels of whole rice of 600 net.
3 barrels middling.
3 barrels small.
330 bushels flour.
2. 3,000 bushels of rough rice from Sandy Island, thrashed by flail, made
155 barrels whole rice of 600 net.
3 barrels middling.
3 barrels small.
330 bushels flour.
3. 3,512 bushels of rough rice, from Pon Pon, thrashed by machine, turned out
In whole rice, 164 barrels 600 lbs. net.
In middling, 4
In small, 3
In flour, 375 bushels.

From Mr. THOMAS BILBY.

New-York Rice Mill, Oct. 12th, 1843.

I have made sundry trials to ascertain the several products of rough rice or paddy, a few of which I give below. In 1835 I made three trials, as follows:

- 1,000 bushels paddy, from Savannah, produced
19,995 lbs. of best quality.
10,145 " of second quality.
853 " of small rice, or chitta.
8,140 " of flour, or douse.
- 1,000 bushels paddy, from Charleston, produced
16,078 lbs. of best head rice.
596 " of best prime.
9,190 " of good to fair.
3,243 " of broken.
370 " of chitta, or small rice.
5,210 " of flour or douse.
- 1,000 bushels paddy, from Wilmington, produced
18,015 lbs. of best quality.
9,859 " of second quality.
1,307 " of small rice.
5,760 " of flour or douse.

The above were trials of different modes of screening, so as to ascertain which would produce the most money: all the trials that I have made since the above, I have not kept any of the small and douse, and I find that every year's rice differs in its proportions as to prime and broken, as also to the whole product. This year it has averaged thirty pounds to the bushel, and about one tenth broken; last year the turn-out was something less.

From J. P. DEYEUX, Napier's Mills,

Charleston, 4th Nov., 1843.

Our mill differs from the pestle mill; we clean by wire cards; we have four of the rubbers in operation, which clean an average of 72 barrels in twenty-four hours. In answer to your interrogatories, I will give you an exact account of some rice bought, cleaned,

are those of Mr. Chisolm, Mr. Hume, and Mr. Lucas.*

Mr. Lucas has not favored me with a reply to my queries in relation to the operations of his mill. Nor has Mr Hume.

From accounts of the operations of Mr. Chisolm's mill, I infer that 8,000 bushels of fair rough rice will yield of prime rice for market.....	} <i>Terces 600 net.</i>
148 300 lbs.	
Of middling.....	3
Of small.....	3
Of flour.....	300 bushels.

In the city of New-York, owing to the public spirit and enterprise of Colonel Benjamin F. Hunt, there has been for some years in operation a very good steam-mill, which receives rice on toll, and consumes, besides, some 50,000 bushels of rough on its own account.

As the other toll mills from which I have heard have furnished results based upon the preparation of South Carolina rice alone, I have thought proper to use only Mr. Bilby's experiment with the Charleston rice.

To 3,000 bushels of rough rice, the N. York mills yield of prime rice....	} <i>Tces 600 lbs.</i>
82 422	

and sold by us—that is, through our factors, 1,391 bushels rough rice, from the plantation of Mr. Thos. Lowndes, formerly Mr. Charles Rowland's, in St. Paul's parish, which yielded 41,075 lbs. merchantable rice, at 600 lbs. per barrel, is 68½ barrels, or 19 bushels to the barrel, or 39,150 lbs. whole, 1,925 lbs. middling, 990 lbs. small, 136 bushels flour. The above was cleaned in about twenty-three hours. The above parcel of rice was purchased 1st December, 1840, at 84 cents per bushel, and was sold at \$3½ on the 10th December. The next parcel that I am able to inform you accurately upon is 1,952 bushels rough rice, from the plantation of Mr. Henry Deas, which yielded 56,270 lbs. whole, 240 lbs. middling, 600 lbs. small, and 147 bushels flour. The above was purchased 2d November, 1841, at 90 cents per bushel, and sold at \$3 7-16ths, and took 20½ bushels to the barrel. I have given you above the result of two parcels, one from Santee, and one from St. Paul's parish. I should like to furnish you particulars of the results of rice farther south; not being able to give you the number of pounds, I will give you the result in barrels of rice from Georgia; say 5,248 bushels rice, received 12th November, 1842, from the plantation of Dr. Daniel, near Savannah, which yielded 250 barrels whole, 12 middling, 11 small, and about 400 bushels of flour. This day we have just finished a parcel of 5,375 bushels from the same plantation, which resulted in 2194 barrels whole, 38 middling, 10½ small, and about 400 bushels flour; you will perceive that the above parcels took a little over 20 bushels to the barrel. The last parcel was very much broken in thrashing, which was done by machinery, which will account to you for the unusual quantity of middling rice; we did not come up to our average of 72 barrels per day on this last parcel, as the machines were new, and required some little time to work to advantage; but I think we may safely calculate upon cleaning three barrels per hour to the four machines.

* Since the above was published, it is ascertained that Mr. Nowell has applied a steam engine to his mill.

Of good to fair rice..... 45 570 *bbls. lbs.*
 Of broken rice (middling †). 16 129 144 521
 Of small rice or chits (26.31 bushels). 2 510
 Of flour or douse (381.21 bushels). 15,630 lbs.

In the mill erected by Mr. Napier, on Cooper river, "*wire cards*" are used instead of pestles for cleaning the grain. This mode of preparing rice imparts a slightly bluish tinge to the grain, though it is supposed to keep longer than rice prepared in the ordinary way. Rice thus prepared will not command as high a price per cwt. as that from the pestle of similar quality, but it is said to be the interest of the planter to patronize the "*cards*," inasmuch as the yield in whole rice from a given quantity of rough is invariably greater, the offal being less. In the year 1842-3, this mill prepared seven thousand barrels, and seems to have given satisfaction to patrons.

The trial of Mr. Deas' rice, from Santee, is selected as the fair test of this mill, 1,950 bushels. At the same rate 3,000 bushels of prime rough rice will yield in—

Tierces 600 lbs.

Prime rice for market..... 144
 In middling rice..... 368.85 lbs.
 In small rice..... 1,323.23 "
 In flour..... 226 bushels.

Recently an ingenious method of lifting the pestles has been invented by Mr. S. K. Williams, of the city of Charleston, to be used in substitution of the lever ("*lifter*") described in Mr. Lucas's mill. One advantage of this invention is said to be the greater rapidity with which the pestles, themselves lighter, may be driven without interfering or "*slamming*." Another, that a system of pestles and mortars may be more compactly arranged in circular form, and may be moved by a less power.

The invention is called "*The Spiral Shaft Rice Mill*." As it has never yet been actually tested, nothing more can be said of it here.

PROCESS OF PREPARATION.—The stones which are used for grinding rice should be five to six feet two inches diameter, and eighteen inches thick at the centre. There is said to be a quarry in Northumberland, affording stones of such excellent substance, that they will grind rough rice enough for packing one thousand barrels without being taken up.

The whole process of preparation may be described generally as follows: From a shed or convenient store-room attached to the mill-house, the rough rice is taken, by means of elevators, (*i. e.* a system of small tin buckets attached to a long revolving band of leather,) up to the highest apartment in the building, to be passed through a sand-screen revolving nearly horizontally, which, in sifting out the grit and small grain rice, separates also all

foreign bodies, and such heads of rice as were not duly thrashed.

From the sand-screen the sifted rough of large size is conveyed directly to the stones on the same floor, where the husk is broken and ground off, thence to a wind-fan below, where the chaff is separated and blown off. The grain is now deposited in a long bin, placed over the pestle-shaft, and corresponding in length with it, whence the ground rice is delivered by wooden conductors into the mortars on the ground floor—ten, twelve, fourteen, or twenty-four in number, as the power applied may justify.* These mortars, improved by Mr. Kidd's design, are constructed beautifully of four pieces of the heart of pine, seasoned. They are in figure a little more than a semi-ellipsoid, and are made to contain four and a half bushels of ground rice each. †

The pestles, also constructed of the heart of pine, and corresponding in number and position with the mortars, are sheathed at foot with sheet iron, partially perforated in many places from within by some blunt instrument, so as to resemble, on a very coarse scale, the rough surface of a grater. They are intended to weigh each 240 to 280 lbs. or thereabout, are lifted by levers six feet long attached (two feet out) to the large pestle-shaft, and make from forty-four to forty-eight strokes in a minute. A mortar of rice is disposed of, or sufficiently pounded, in one hour and forty minutes to two hours. The grain thus pounded is again elevated to the upper floor, to be passed through a long horizontal rolling-screen, slightly depressed at one end, where, by means of a system of wire-sieves, grading coarser and coarser towards the lower end, are separated, first the flour, second the "*small rice*," (the eyes and smaller particles of the broken grains,) third the "*middling rice*," or the smaller and the half-broken grains, fourth and last the "*prime rice*," the larger and chiefly unbroken grains, which fall through the largest wire, and forthwith descend to the "*polishing*" or "*brushing screen*" below, whence it descends through a fan into the barrel on the first floor, where it is packed, and the preparation is completed. ‡ The head rice, or largest grains of all, together with the rough, unbroken by the stones, passes off at the lower end of the screen, to be pounded over.

The "*brushing screen*" consists of a vertical cylinder or drum, two feet in diameter, by from four and a half to six feet in height, to the surface of which are attached, vertically, shreds of sheep skin closely packed; this

* It is understood that Mr. Lucas's mill drives 23 pestles, and Mr. Chisolm's 30.

† Mr. Chisolm has constructed in his mill a second screen for polishing, through which the rice from the brushing screen is passed on its way down to the barrel.

drum is made to revolve with great velocity within, and lightly brushing a cylindrical frame of iron wire made into a fine sieve. In passing down spirally between this clothed drum and the exterior cylindrical wire-sieve, the grains are relieved of the particles of flour which still adhere to them, and which are brushed off by the wool, and forced out through the meshes of the wire. The rice, thus brushed clean and polished against the wire, is packed in barrels constructed of pine staves to contain six cwt. net. The middling and small rice are passed through a fan which blows off from them the flour into an apartment kept for that purpose. They are packed separately, and used as provisions for the laborers on the plantation during the warm months, chiefly at Christmas holidays and throughout harvest, and habitually by the families of both the proprietor and his overseer.

Rice being so completely protected by a silicious husk, and thus so much less liable to damage from transportation in the rough than when cleaned; owing, too, to the superior manner in which clean rice can be presented in the European markets fresh from the screen, capitalists concerned in this trade have caused mills, propelled by steam, to be erected on Mr. Lucas's plan, at various ports in England, and on the continent, at which upward of 400,000 bushels of rice from this state are annually prepared—besides a quantity of paddy from the East Indies, and from other quarters.

To encourage the construction of such machinery in Great Britain, and to protect the capital invested in the mills, the importation of rough rice rather than clean is encouraged in that kingdom by a discriminating duty in favor of the former, equal to four dollars per barrel of the latter.

In England there are in operation four mills—two in London, and two in Liverpool—consuming each about 75,000 bushels of rough annually. When the price of Carolina rice ranges high, these mills are to a great extent employed in manufacturing paddy from the East Indies.

The mill in Scotland has been converted to another purpose.

In Denmark, at Copenhagen, a mill has been in operation about six years; consumption about 90,000 bushels of rough.

At Bremen there is a mill intended to prepare either wheat or rice, according to the state of the markets.

At Flensburg, also, there is a mill constructed for both wheat and rice, capable of manufacturing 20,000 bushels of rough rice.

In Holland, at Amsterdam, a mill has been some years in operation, which requires from 60 to 80,000 bushels of rough rice annually.

In Portugal, at Lisbon, there is a small mill which prepares either wheat or rice, re-

quiring about 10,000 bushels of Carolina annually.

In France, at Bordeaux, a mill has but recently been put in operation; for it, in the year 1842, were shipped about 60,000 bushels of Carolina rough.

A mill, constructed after Mr. Napier's plan, has been erected by the "Northampton Rice Company" at Maranh, in South America, where it is in successful operation. It is supplied with paddy grown in the neighborhood.

The articles received from the several countries above named, as well as from Cuba, may here be mentioned.

From Denmark and Holland, as indeed from all the other countries, (England and France excepted,) little is received in the shape of return cargoes—the purchases of both rough and clean rice being for the most part paid for by bills of exchange on London.

From Bremen were once received glassware, bottles, bagging, hams, paving-stones, &c., but the United States tariff of duties has put a stop to these importations.

From Portugal the returns are fruit and wines principally.

From France the articles at present received are silks, wines, and brandy. This trade also has been affected by the tariff.

From England are imported in return, iron, hardware, manufactures of cotton, woollen and linen, salt, coal, &c.

From Cuba, the returns are sugar, molasses, coffee and fruit.

The consumption of rice in Cuba is estimated at 15,000 barrels for the north side, and 2,000 for the south side of the island.*

EXPORTS.—John Archdale, governor of Carolina in 1694-5, who gave more general satis-

* The following, together with much other interesting and useful information for the foregoing memoir, has been furnished by the intelligent and obliging gentlemen constituting the firm of *Robertson & Blacklock*, of the city of Charleston, factors.

Rice is consumed in England and France as an article of luxury, except a small quantity annually made up into ornaments in both countries, consisting principally of rice paper, beads, clock cases, and chimney ornaments. In the north of Europe, it is used as an article of food, but cannot be afforded at a sufficiently low rate to be substituted for potatoes or grain grown upon the spot. In the time of war, its value is appreciated; it has been found to contain the greatest quantity of nutriment in the smallest compass, portable, and least liable to damage, and was consequently much used by the British troops in the lengthy Peninsular war.

In Cuba, it is used as a breadstuff in preference to any other kind of food. The consumption of Carolina rice begins, however, to be much interfered with by the rice grown in and exported from Spain, as well as the rice now grown in the island of Cuba itself; also a very good quality of rice is now imported from Campeachy. The present duty on Carolina rice in Cuba is \$2 25 per 100 lbs., while the duty on that from Spain is almost nominal. From Campeachy the duty may be considered one third less, as it is brought in Spanish vessels, which enjoy that discriminating advantage in favor of their flag. The high duty on rice from this country also operates very much against its consumption.

faction to all parties than any other under the proprietary rule, was a Quaker—a very pious, mild man. He succeeded in the government Landgrave Smith, and was in turn succeeded by Joseph Blake. He returned to England in the year 1696. In the year 1707 was printed for him in London a pamphlet, which, from internal evidence, appears to have been written some two or three years anterior. In this pamphlet he says: "Notwithstanding all the discouragements it, the trade of the colony, has met withal, which are many, yet seventeen ships this year came laden from Carolina with rice, skins, pitch, tar, &c., in

the Virginia fleet, besides several straggling ones."* From this time to the year 1720, during the greater part of which time the coast was infested by fleets of piratical vessels under command of the notorious Steed Bonnett, and others, there is extant no record of the exports of the province.

In a statement intended for the House of Commons, drawn up about the commencement of the war with France, by the merchants of London, concerned in the rice trade, and published by Governor Glen in his "Description of South Carolina," 1761, the exports of rice from Carolina are thus given:

From 1720 to 1729 inclusive.....264,788 barrels—44,081 tons,†
 " 1730 to 1739 "419,525 " —99,905 "

From another source is obtained the following statement:

EXPORTS OF RICE FROM THE PORT OF CHARLESTON, SOUTH CAROLINA.

From 1724 to 1725—Nov. to Nov.....	Casks	17,734
" 1725 to 1726 " "		23,031
" 1726 to 1727 " "		26,884
" 1727 to 1728 " "		29,905
" 1728 to 1729 " "	Barrels	32,384
" 1729 to 1730 " "		41,722
" 1730 to 1731 " "		39,487
" 1731 to 1732 " "		37,068
" 1732 to 1733 " "		50,726
" 1733 to 1734 " "		30,323
" 1734 to 1735 " "		45,317
" " " " "	Bags	1,038

EXPORTS FROM CHARLESTON, SOUTH CAROLINA.‡

	Barrels.	Bags.	Price at last mentioned period.		
From 1735 to 1736—Nov. to Nov.....	52,349	1,554			
" 1736 to 1737 " "	42,619	519	£3	0s.	0d.
" 1737 to 1738 " "	34,324	—			
" 1738 to 1739 " "	67,117	—	2	0	0
" 1739 to 1740 " "	91,110	—	2	5	0
" 1740 to 1741 " "	80,040	2,137	2	15	0
" 1741 to 1742 " "	46,196	—			
" 1742 to 1743 " "	73,416	—	2	0	0
" 1743 to 1744 " "	80,788	—	1	5	0
" 1744 to 1745 " "	59,627	—	0	17	6
" 1745 to 1746 " "	54,101	—	1	0	0
" 1746 to 1747 " "	54,146	—	2	6	0
" 1747 to 1748 " "	55,183	—	2	15	0
" 1748 to 1749 " "	41,034	—			
" 1749 to 1750 " "	48,011	535			
" 1750 to 1751 " "	61,522	223	1	17	0
" 1751 to 1752 " "	78,360	186	3	10	0
" 1752 to 1753 " "	35,522	—	2	5	0
" 1753 to 1754 " "	88,659	—	2	10	0
" 1754 to 1755 " "	96,778	—	2	0	0
" 1755 to 1756 " "	51,718	—			
" 1756 to 1757 " "	60,789	44	2	5	0
" 1757 to 1758 " "	101,359	74	1	17	6
" 1758 to 1759 " "	79,642	—	1	10	0
" 1759 to 1760 " "	101,059	44	2	10	0
" 1760 to 1761 " "	101,842	—			
" 1761 to 1762 " "	107,292	—	2	10	0
" 1762 to 1763 " "	116,715	—	3	5	0
" 1763 to 1764 " "	130,500	—			
" 1764 to 1765 " Sept. 14.....					
" 1765 to 1766 " Oct. 10 to Aug. 24.....					
" 1766 to 1767 " Nov. 1 to Oct. 10.....					

* 2 Car. Col. p. 97.

† The weight of the barrel would seem to have been about 325 lbs.

‡ The weight of the barrel now 400 lbs.

§ S. Carolina Gazette.

As follows:	Barrels.
To Great Britain.....	73,325
To Portugal.....	14,439
To Spain.....	1,760
To Italy.....	222
To Foreign West India Islands.....	975
To British " ".....	80,305
To ports on this continent.....	9,665
In the year 1770, from the colonies.....	150,529—\$1,580,000*

From the port of Charleston, South Carolina, from	Barrels.	Price at last-men ⁿ tioned period.
1772 to 1773, from 1st Nov. to 2d Aug.....	112,469.....	£3 10s. 0d.

	Barrels.
From 1773 to 1774, from 12th Nov. to 7th Nov....	118,482
From Beaufort, same time.....	3,630
From Georgetown.....	2,964

Crop of 1773 exported.....Total 125,076

EXPORTS FROM THE UNITED STATES.

Years.	Tierces.	Value on Shipboard.		
1791	96,980	—	1821.....	88,221
1792.....	141,762	—	1822.....	87,089
1793.....	134,611	—	1823.....	101,365
1794.....	116,489	—	1824.....	113,229
1795.....	138,526	—	1825.....	97,015
1796.....	131,039	—	1826.....	111,063
1797.....	60,111	—	1827.....	133,518
1798.....	125,243	—	1828.....	175,019
1799.....	110,599	—	1829.....	171,636
1800.....	112,056	—	1830.....	130,697
1801.....	94,866	—	1831.....	116,517
1802.....	79,822	—	1832.....	120,827
1803.....	81,838	\$2,455,000	1833.....	144,166
1804.....	78,385	2,850,000	1834.....	121,886
1805.....	56,880	1,705,000	1835.....	110,851
1806.....	102,627	2,617,000	1836.....	112,983
1807.....	94,692	2,867,000	1837.....	106,084
1808†.....	9,228	221,000	1838.....	71,048
1809.....	116,901	2,104,000	1839.....	93,320
1810.....	131,341	2,628,000	1840.....	101,660
1811.....	119,356	2,387,000	1841.....	101,617
1812†.....	77,190	1,544,000		
1813.....	120,843	3,021,000		
1814.....	11,476	230,000		
1815.....	129,248	2,785,000		
1816.....	137,843	3,555,000		
1817.....	79,296	2,378,001		
1818.....	88,181	3,262,697		
1819.....	76,528	2,142,644		
1820.....	71,663	1,714,923		

The following statement of exports from South Carolina, derived from the journals of the day, is given from the year 1832, the period from which has been kept an account of the receipts of rice at the port of Charleston. The exports coastwise, being rarely cleared, cannot with accuracy be given. The foreign exports of rough rice are included in the foreign exports of tierces, at the rate of twenty-one bushels to the tierce, and so with the exports coastwise.*

* Pitkin's Statistics.

† The year of the embargo.

‡ War with Great Britain during the years 1812, 1813, and 1814.

* This statement is furnished by Mr. J. W. Cheeseborough.

October to October.	CLEAN RICE.				ROUGH RICE.	
	Receipts. Tierces.	Export Foreign. Tierces.	Export Coast. Tierces.	City Con- sumption. Tierces.	Export Foreign. Bushels.	Export Coast. Bushels.
1832-33.....	143,473	90,246	47,003	7,776	—	—
1833-34.....	117,403	80,089	30,918	6,880	—	—
1834-35.....	121,898	74,868	42,501	5,600	317,594	41,288
1835-36.....	133,633	79,007	47,226	6,200	356,752	63,235
1836-37.....	119,961	68,896	40,614	5,500	512,808	39,609
1837-38.....	90,384	51,514	30,837	6,600	336,442	44,733
1838-39.....	106,001	63,617	36,295	6,850	470,412	43,960
1839-40.....	107,108	68,795	31,591	6,800	431,506	10,342
1840-41.....	107,052	75,265	25,970	6,200	455,592	37,166
1841-42.....	118,004	75,789	34,174	7,900	445,685	15,770
1842-43.....	136,732	71,575	58,011	7,300	294,018	33,493

The exportation of rough rice to foreign countries commenced about the year 1823,* as appears from the following (among other testimony) "account of the quantity of rice imported into, and re-exported from the United Kingdom of Great Britain and Ireland, for ten years, ending 5th January, 1828. Ordered by the House of Commons." Extracted from the *Southern Agriculturalist*, vol. i, p. 461.

CLEAN RICE.				Exports.	Rice, cleaned from Paddy.
Imports.					
	British Possessions.	Foreign.	Total.		
1819.....cwts.	322,986	102,532	425,518	142,880	—
1820.....	375,461	95,763	471,224	150,552	—
1821.....	192,982	89,085	282,067	100,403	—
1822.....	73,831	56,720	130,551	105,249	—
1823.....	12,871	107,388	120,259	139,600	—
1824.....	80,648	94,056	174,704	79,370	—
1825.....	24,772	123,194	147,966	92,897	—
1826.....	18,918	35,779	54,697	50,463	—
1827.....	50,380	40,774	91,154	35,445	—
1828.....	107,325	43,897	151,222	51,620	—

ROUGH RICE.				
1820.....	758	—	758	—
1821.....	2,093	—	2,093	—
1822.....	781	—	781	—
1823.....	259	—	259	—
1824.....	298	—	298	—
".....bushels.	193	13,053	13,246	—
1825.....cwts.	—	—	—	676
".....bushels.	3,272	92,480	95,752	—
1826.....cwts.	—	—	—	2,717
".....bushels.	4,839	111,646	116,485	—
1827.....cwts.	—	—	—	5,435
".....bushels.	2,855	113,526	116,381	—
1828.....cwts.	—	—	—	1,070
".....bushels.	10,322	171,898	182,216	—

DUTY.

On British clean, 7s. 6d.; in 1820, reduced to 5s.; in 1823, to 4s.; subsequently to 6d. per cwt.

DUTY.

On foreign clean, 20s.; in 1820, reduced to

15s.; in 1842, to 6s. per cwt.

On British rough, 2s. 6d. per cwt.; in 1823, to 7d. per bushel; in 1827, to 3d.; in 1842, to 1d. per quarter.

On foreign rough, 10s. per cwt.; in 1823, to 2s. 6d. per bushel; in 1842, to 10d. per bushel.

* The first cargo of rough rice was shipped to England from Charleston by J. Lucas, jun., in the year 1823.

RICE.—In many years the crop of rice has neither been so large nor so high as in the year

1847. In 1833 the quantity exported was nearly the same as in that year, but did not sell for so much by nearly \$6 per tierce, or 25 per cent. lower than last year's prices.

EXPORTS OF TIERCES FROM THE UNITED STATES.

	1833	1848	1849	1850	1851
Russia...	2,352	1,787	3,333	2,870	980
Prussia...	98	1,791	96	2,537	1,538
Denmark	5,906	7,304	2,716	6,757	4,398
Hanse towns	15,318	9,009	17,427	15,436	17,867
Holland	12,897	1,408	5,753	8,232	4,156
Belgium...	1,047	6,447	9,941	9,420	5,301
England...	20,604	18,683	28,058	26,754	15,798
British W. I.	4,230	4,303	3,956	4,267	2,777
France...	19,083	8,942	10,203	11,469	6,784
Other...	16,294	28,048	32,139	24,304	27,618
Extra...	26,745	12,531	15,237	15,003	18,513
Total..	144,163	100,400	128,861	127,060	105,590
Value..	2,744,418	2,331,824	2,509,362	2,631,557	2,170,927
Pr. tierce..	\$19.03	22.22	19.90	23.00	20.50

The greatest increase since 1842 has been to Prussia, Belgium, the Hanse towns, and Holland, under the influence of the modified duties upon that article, adopted in 1838, through the influence of our minister, the late Mr. Wheaton, at the Court of Berlin. The export to England has declined, notwithstanding that the price per tierce has been lower. It is difficult, however, for our rice planters to contend against the cheap rice of the East Indies, in those years when freights are cheap.

The extra demand of England for food last year induced a larger import of rice than ever, and she apparently outbid Prussia for it, and she took less directly from the south, owing to the high freights. The Hanse towns and Belgium are the avenues into the Customs Union, and through them and Prussia were last year sent 24,622 tierces, worth \$615,550, against of \$16,453 in 1833, when the crop was larger. The revenues of the Customs Union increased by this modification of the duties upon rice, and the result so favorable to the incomes of the German governments participating in those revenues, were eminently calculated to promote further reforms in the same direction.

The following embraces general remarks in relation to rice for a series of years:

QUANTITIES AND VALUE OF RICE EXPORTED FROM THE UNITED STATES.

	Tierce	Value	Value pr tierce
1833.....	144,163	\$2,744,418	\$19.03
1839.....	71,819	1,731,819	24.25
1840.....	101,460	1,842,076	19.10
1842.....	114,617	1,907,357	16.65
1844.....	134,715	2,183,453	16.20
1845.....	118,631	2,160,456	18.25
1846.....	124,007	2,564,991	20.50
1847.....	144,427	3,603,896	24.90
1848.....	109,407	2,321,824	23.20
1849.....	128,861	2,509,362	19.90
1850.....	127,060	2,631,557	23.00
1851.....	105,590	2,170,927	20.50

RICE-PLANTING.—By the mail which conveys this, I transmit you a copy of Col. J. J. Ward's report on the cultivation of the rice crop, from which your correspondent, whose name has escaped me, (his letter being misplaced in Columbia,) may derive some notions useful to him in his proposed essay at rice-planting.

I have no experience of "inland planting" myself. In the desire to serve your friend, I applied to several gentlemen, habitually cultivating inland swamp, for the systems practised by them respectively. I have to regret that none of them, as yet, have found it convenient or thought proper to favor me, by keeping to their promises.

Information is seldom obtained from the planters in any other way than by conversation. I desired to be more accurate, by furnishing their own statements; but as the season is advancing, I will not longer withhold the impression as to their mode of culture, made on my mind by their several verbal communications.

It is chiefly this, that they all approach as near, and practise as closely as circumstances will permit, the systems most approved among the planters on Tidewater swamp.

Where the water flows or ebbs, and there is consequently a command of water, the system is such in the main as described in my memoir, and also recently and in detail by my friend Col. Ward, in the report I send you.

As your correspondent will not have the benefit of such command of water, but must use it, I presume, from a "reserve," I will venture to indicate what would be my own course under similar circumstances.

I should select new land, as it is free from grass, and grass is the greatest enemy to rice in inland swamp; water is the only means by which it can be effectually subdued, year by year, and the inland planter has not the necessary command of water.

After clearing the land as well as one would for any other crop—or in case of land already cleared, after ploughing it up early for the frost to act upon it, and draining it well, with drains (18 inches by 3 feet) 75 feet apart; then, when about to plant, levelling the surface with the harrow and the hoe, I would trench it with a very narrow hoe, placing the trenches at the distance of 12 inches one from the other, and sow the rice carefully, in a "string," i. e., as thin (but regular) as possible; cover it as other seed, and if it be not likely to have rain upon it in a day or two, I would flow it just to cover the land for six days; but if rain be plenty, I would not flow until the plant is seen, here and there, generally coming through the earth; (this, in fine weather, will be seen in 12 to 15 days;) the birds will then be very troublesome, if uncovered with water, destroying a great deal. The land should then be covered with

water ("point flow") 6 inches deep, if old land. In case of new land, where there is no grass, I would flow only deep enough to cover the rice from birds at first, then gradually, as the plant grew stronger and taller, raise the water up to 6 inches generally: in case the planter is not certain of having water enough to keep a flow of 40 days, (to help kill the young grass,) and hold on until the plant, which will be stretched and weakened by it, is strong enough to stand up. When the water shall be drawn off, (it will be so in April in 40 days, in May some 30 to 35,) I would then send in hands and pick out all the long grass which may be observed in the trenches with the rice plants; (these the hoe cannot reach, and they will only come up by the root when the earth is soft with water;) then draw the water off gradually. The plant is then putting out new roots. Whilst they are still short, and as soon as the land is dry, say in 8 days, hoe it deep with hoes not wider than 4½ inches, (4 is better;) the new roots will easily penetrate the broken soil, and the plants will flourish. In 16 to 20 days more, hoe it again, but very light, so as to level the uneven surface, and to cut every spear of grass, picking out by hand what the hoe cannot reach. Thus effectually cleaned, the rice may be "laid by" in 2 or 3 days; it will then be "jointing," or nearly so. The water should now (after at least 30 days of dry growth for April rice) be put on again full six inches, until the head shoots out; then it may be raised higher with impunity, and will be a stay to the tall plant in times of heavy wind. When the plant is in bloom it should by no means be disturbed for any purpose.

In 60 days after jointing, the grain is generally ripe for the sickle; the weather or season may have the effect to retard or advance it a day or two; the water should then be drawn off, and the reapers set to work. In Carolina, the sickle or "reap hook" is used, with which each hand will cut a half acre in the day, then tie in sheaves, and stock in the field what was cut the day before.

The task with us is to cut ½ of an acre early in the morning; then, when the dew is off, tie and carry to the barn-yard the ½ of an acre which was cut the day before, supposing the sun to have been shining duly.

I think that in inland it would be better also to give the like task, especially the first year, viz: cut ½ an acre, tie, ("bind,") and carry ½, or stock it in the field, if dry, so as to get done handling the rice before the night dews wet it.

The thrashing out is laborious; this, as well as the pounding or cleaning, is done here by machinery, some account of which may be found in my memoir, and also in the pamphlet already referred to. This machinery is expensive: the first will cost from \$3,000 to \$7,000—the other from \$10,000 to \$18,000. The

machinists here could furnish particulars.—*Col. Allston of S. C.*

N.B.—From the "point flow," he will be good enough to pursue, as nearly as he can, the method described by J. J. Ward, in his report from where it is marked, taking care to substitute a five inch hoe for his "six inch."

REPORT ON RICE CULTURE.—Your committee beg leave to report what in their opinion is the best mode of cultivating rice.

It is scarcely necessary to observe that the land should be in good order; that is, that the banks and trunks should be in such condition as to keep the water within or without the fields, as circumstances may render necessary; the drains ought to be thirty-seven and a half feet apart, and at least three feet deep and eighteen inches wide; the size of the fields to be determined to a great extent by the force employed; with a strong force they can be of much larger dimensions than with a smaller. It is evidently important that every part of the field should be as nearly as possible in the same condition, as regards hoeing, &c., when the water is put on; otherwise, from the different state of the plant, one portion would require different treatment from another, which, of course, is impossible. Perhaps inattention in this respect has produced more mischief than might at first sight appear. During the winter the land ought to be well turned, either by the plough or hoe. As planting time approaches, the land should be well mashed, and laid off in bold trenches, with a four inch "trenching hoe," thirteen inches from centre to centre; the seed is to be carefully sowed, at the rate of from two and a half to three bushels the acre, according to the order the land may be in; the greater quantity to be used when it is not in the best state of preparation. There are different opinions on the subject of covering the seed; on low and gummy lands, the "open planting" is the best; but when the soil is well prepared, a careful covering is to be preferred. The sprout water is then put on, and remains until the grain "pipes," which will take place, according to the weather, &c., in from three to six days; the water is then taken off, and the land kept as dry as possible, until you can see the rice the whole length of a row across the bed, coming out in fine "spires," which is frequently called the "needle state." The point flow is then put on and retained from three to nine days, or as long as it can be kept on without weakening the plant so much as to cause it to fall when the water is taken from it. This is especially important, as the grass being young is more effectually destroyed than at any later stage of the crop. As soon as the rice is strong enough, which will depend on circumstances, a light hoeing should be given it, with a six inch "rice hoe." About twelve days after this first hoeing, it should be well stirred with the "six inch hoe"

again, and allow two or three days (should the weather be dry) for the sun to kill the grass disturbed by the hoe. "The long water" is then put on, and the rice to be overtopped for three or four days; the trash which will float up must be carefully raked on the banks. By this deep flow not only is the trash removed, but the insects with which the rice is infested are for the time completely destroyed. The water is then gradually slackened to about six inches deep on the general level. A notch must be made on the trunk or elsewhere, and the water kept as near the same level as can be, for from twelve to twenty-three days, according to the quality of the land; the heavy land requiring the longest water; (the water, however, should not be taken off on the fifteenth day, as from the state of the plant at that time it is apt to "fox.") The water is then to be gradually slackened off, to prevent the rice from falling in the low parts of the field, it being weak from the greater depth of the water; and this points out the great importance of bringing the surface of every field as nearly as may be to a level, as in the lower spots the rice is often materially injured, and in the high places the grass is not destroyed. When the water is off the surface, the trunks are to be thrown open, and the land again kept as dry as possible. During this flow, or rather about the time of slackening off, as what grass may have escaped the hoe will have grown rapidly, it is advisable to "turn" the hands in and pull it out. As soon as the land is sufficiently dry, it is to be *dug as deep as practicable*, with a four inch rice hoe, to enable the roots of the plants to *spread* with greater facility. In about twenty-two days after the "long water," the fourth and last hoeing should be given with a four inch hoe, and should be very light, merely to level the clods left from the digging, and to destroy the young grass, particular care being taken not to injure or disturb the roots of the plant. A day or two after this hoeing, the "lay by" water should be put on, about the same depth, or perhaps a little deeper than the "long water" notch; lower or higher according to the growth of the rice. Care should be taken, when the rice begins to round, that the water should not get over the fork. It is to be noticed that as soon as the weaker portion of the rice gains sufficient strength, the water is to be run through the field every "tide," which should be regularly attended to until the crop is ready for the hook. When circumstances require or will admit of the "open planting," the seed ought to be well clayed before sowing. The water is then put gradually on, and kept on until the rice is in the "green fork;" it is then dried for three days to allow the plant to take root, and then again flowed; the further treatment being the same as before stated for the "covered planting."—*J. J. Ward.*

BEST MODE OF CURING AND MILLING RICE.

—The committee to whom was referred the consideration of the "best mode of curing and milling rice," beg leave to report:

That almost every plantation has its own particular method of curing rice; so in almost every mill will be found something peculiar in the preparation and cleaning of rice. We may with reason suggest that the market is the true test of the best mode. The rice may be pronounced best cured and best milled which makes the fairest show and commands the most attention in the market. To produce such rice, however, something more is requisite than curing and milling. The previous winter work should have been well placed on the soil. The whole system of planting must have been good. The seed should have been well selected, free from red rice, and a full thin-skin grain; it should have been sown regular, and not too thick; then it should have been carefully cultivated, regarding the use of both the hoe and water. To all this, industry and attention are requisite. The attentive and observant planter who keeps a journal, will soon be taught by experience the best method. He will see that it is a mistake to suppose, that because rice is an aquatic plant, it will flourish in land which is kept in a sodded state; but on the contrary, that unless the land be well flowed, it should be well drained.

It is true that some of the best samples of rice are often produced from old lands, which yield no more than 25 and 30 bushels to the acre. But as it is the desire of every one engaged in planting to increase the quantity as well as to improve the quality of his crop it is taken for granted that the previous preparation of the soil has been duly attended to, (the last and least object of which is the surface,) and that the culture has been good throughout the season.

Curing.—The field then is to be dried some two or three days before the grains be *fully* ripe, and the rice cut forthwith, laying it of an even thickness on the stubble, the heads being clear of any water.

If the weather be fair, one day's sun is sufficient. Accordingly, after the dew is off, on the day after the rice is cut, it should be tied into sheaves and borne to the barn-yard, and there stacked before the dew falls again, in ricks about seven feet wide, twenty feet long, and built up as high as a man can pile from a stool two feet high. Here it undergoes a heat which is supposed to mature and harden the grain. If, however, this process be not duly noticed; if the heat be too great and continue too long, (as it may, depending on the condition of the rice and state of the weather,) the rice is said to be "mow-burned," and is injured. The greatest heat to which the grain can be subjected without injury, is deemed advisable. The rice will keep well enough in the ricks

herein described, until thrashed, but it is often transferred to large stacks after the harvest, for safe keeping—stacks from 12 to 16 feet in diameter.

Milling.—After having been thrashed, the rice should be "rayed," i. e., the broken and imperfect grains separated from the full, the small and lighter from the large, &c., so that the parcel of rice to be milled be made up of grains as nearly equal in length as practicable. The grinding is believed to be the most important part of the process; it is between the stones that the rice is most apt to break. Each grain revolving probably on its shortest axis, according with a well-tested principle of philosophy, the stones should be set in regard to their length.

From these stones, with every hull, if possible, broken, if not shelled off, the rice passes under the pestle. The proper degree of pounding can only be ascertained by the inspection of a practised eye. On being discharged from the mortar, the rice must be thoroughly separated by rolling screens and fans from the flour and broken grains. It then should be passed spirally through the brushing screen, which revolves with great rapidity, (the longer the screen the better, provided the velocity be not diminished,) until it is delivered into the barrel, clean, bright, and pearly, fully "prepared" and ready for market.

This whole process, which, in the main, must be known to every planter of any experience, is thus familiarly described, and, at the request of the society, is herewith submitted by (COL. ALLSTON.)

RICE—ANALYSIS OF, ETC.—Dr. Shepard, of South Carolina, under direction of the Agricultural Society of that state, analyzed, a year or two ago, completely, the rice plant and soils. The analysis is of sufficient importance to have a place in our Review. We have, in previous numbers, given the analysis of sugar, corn, cotton, etc., and their lands.

1.—OF CLEAN COMMERCIAL RICE.—Burned in a porcelain capsule under the muffle, until all combustible matter had disappeared, a blebby glass-like ash remained, weighing 0.404 per cent., or less than half a part in one hundred of the rice consumed.* Corrected statement of mineral constituents of clean rice=0.487 per cent.

* It being requisite to determine the inorganic ingredients of rice, and of the various parts of the entire plant, as it may reasonably be supposed they are returned to the soil again on the decomposition of the plant and its parts, (whether taking place spontaneously or otherwise,) and not to give those ingredients in all cases as they are actually yielded to us in the process of destructive analysis, I shall subjoin many of the constituents of the ash residue, not as found, but rather as the principles of chemistry authorize us to declare them, in accordance with the above requisition.

Composition of 100 parts of this residuum.

Phosphate of lime (bone earth,) with decided traces of intermixed phosphate of magnesia.....	76.20
Phosphate of potassa, nearly 5 per cent.....	} ...24.8
Silica, sometimes as high as 20 per cent.....	
And the following salts in traces only. They are enumerated in the supposed order of their abundance, viz :	
Sulphate of potassa.....	
Chloride of potassium.....	
Carbonate of lime.....	}
Carbonate of magnesia.....	

2. OF THE COTTLEDON, COMMONLY CALLED

THE EYE OR CHIT OF THE GRAIN.—Ignited under a muffle on a porcelain plate, it burns with a bright light, and the ash flows into a glass. From the intimate way in which it adhered to the plate, it was impossible to determine its weight, or even its composition, in a satisfactory manner. The expression 6.824 per cent., however, may be taken as an approximation to the weight of the residuum. In composition, it appears scarcely to differ from the ash of clean rice, except in being somewhat richer in lime, and in the phosphoric and sulphuric acids.

3. OF THE FINE RICE FLOUR, AS IT COMES DOWN ON THE BULK.—It gives, on burning, a bulky, porous ash, weighing 10.746 per cent. of the flour consumed. Corrected as above =12.30 per cent.

Composition of 100 parts of this residuum, as follows :

Silica, with traces of combined potassa	38.02
Phosphate of lime, with traces of phosphate of magnesia.....	54.60
Phosphate of potassa (rich in this salt).....	} and loss 7.38
Sulphate of potassa.....	
Sulphate of lime, in traces.....	
Chloride of calcium, ".....	
Chloride of potassium, ".....	
Lime and magnesia, ".....	

4. OF COARSE RICE FLOUR FROM THE BULK.—It gives, on burning, a bulky, porous ash =11.23 per cent. Corrected statement, =11.831 per cent.

Composition of 100 parts of this residuum, as follows :

Silica, with traces of combined potassa	69.27
Phosphate of lime, with traces of phosphate of magnesia.....	28.94
Phosphate of potassa (rich in this salt).....	} and loss 6.79
Carbonate of potassa, in traces.....	
Sulphate of potassa, ".....	
Lime and magnesia, ".....	
Chloride of calcium, ".....	
Chloride of potassium, ".....	

100.00

5.—OF THE HUSK, COMMONLY CALLED CHAFF, OR OFFAL.—Burns, with little or no flame, into a perfectly white, silicious skeleton of the husk. In weight it equals 13.67 per cent.

Composition of 100 parts of this residuum, as follows:

Silica.....	97.551	
Phosphate of lime, with traces of alumina and oxides of iron and manganese.....	1.023	
Carbonate of lime.....	0.294	
Phosphate of potassa.....	} and loss	1.132
Sulphate of potassa, in traces.....		
Chloride of potassium, ".....		
Carbonate of potassa, ".....		
	100.000	

6.—OF THE RICE STRAW.—Burns into an ash which is a semi-fused, glassy frit. It weighs 12.422 per cent.

Composition of 100 parts, as follows:

Silica.....	84.75	
Potassa, with probable traces of soda, combined with the above silica.....	8.69	
Phosphate of lime, with traces of oxide of iron and manganese.....	2.00	
Carbonate of lime.....	2.00	
Alumina, in traces.....	} and loss....	2.56
Phosphate of potassa..		
Carbonate of potassa..		
Sulphate of potassa....		
Chloride of potassium..		
	100.00	

7.—RICE SOIL, FROM WAVERLEY ISLAND.

Silica, with fine sand, one third of which is feldspathic and slightly magnesian or talcose; and contains alumina, with from 2 to 4 per cent. of potassa, mingled with soda and magnesia.....	47.75	
Alumina, partly combined with humic acid.....	12.85	
Peroxide of iron, (combined with humus), with decided traces of phosphate of lime (bone-earth).....	4.15	
Carbonate of lime, with traces of magnesia.....	0.40	
Water of absorption..... 8.50	}.....	32.00
Humus (organic matter) 23.50		
Chloride of calcium.....	} and loss.....	1.35
Sulphate of lime....		
Sulphate of magnesia.....		
Sulphate of potassa.....		
Chloride of sodium.....		
	100.00	

8.—RICE SOIL FROM MATANZAS ON THE MAIN.

Silica, with fine sand as above.....	60.50	
Alumina, partly combined with humic acid.....	8.15	
Peroxide of iron, combined with humus, with decided traces of phosphate of lime.....	3.00	
Carbonate of lime, with traces of magnesia.....	0.85	

Water of absorption. 9.00	}.....	27.50
Humus..... 18.50		
Chlorides of calcium and of sodium.....	}.....	1.00
Sulphates nearly as above.....		
Loss.....		101.00

Since rice culture is likely to be extensively adopted before very long in the low, river, and bottom lands of Mississippi and Louisiana, we deem the preservation of this matter important. The reader will find great advantage from consulting Col. Allston's paper above referred to, and, as containing additional valuable particulars, we introduce some remarks made by Mr. Ruffin, in his late agricultural survey of South Carolina:

GENERAL DESCRIPTION OF THE TIDE

SWAMPS IN THEIR NATURAL STATE.—The great body of alluvial swamp lands on the Waccamaw and Pee Dee rivers, and subject to their tides, are of similar general character to all other swamps formed by the alluvium of fresh tide waters. In South Carolina, and generally elsewhere, the soil being wholly formed by matter deposited by the rivers and by the remains of plants which died and rotted where they grew, these lands are necessarily composed very largely of vegetable matter, mostly decomposed; and so far as that composition may serve, they were as rich as lands could be, and of an unknown depth of soil. Their earthy parts are mostly of fine clay, such as could remain long suspended in water, and which has been mostly brought by the long course and turbid current of the Pee Dee. Of course, rivers flowing through calcareous regions, and washing down fertile and well-constituted soils, must have also brought down much calcareous matter intermixed with the clayey, and serving to fix and retain the great and enduring fertility which these lands have exhibited under the long continued and increasing drafts made by incessant rice culture. Still there cannot be near enough of lime in these soils; and there is a still greater deficiency of the ingredient of silicious sand necessary for a properly constituted soil of the best productive power.

The rise and level of the tides have necessarily fixed the final elevation and grade of surface of all such lands. The earthy matters brought down the river by its floods would continue to be deposited on the marshes, and wherever else the water was most tranquil, until such deposited earth reached to the level of the height of tide water. The lower the surface was at any previous time before this height, the more water, loaded with materials for alluvium, would be over it, and the more it would receive of the tribute. And when, by such additions, the surface had risen to the full height of ordinary high tide, it would no more be covered, except on rare occasions, and of course its increase would almost cease. Thus, there was for ages a con-

stant tendency of the waters to raise all the lower parts the fastest, and to make the lower equal in height to the highest. And when this was done as nearly as might be over any certain extent, the operation ceased there, and was continued lower down toward the sea.

Thus, the alluvial lands formed by the deposits of tide rivers necessarily have surfaces very nearly level. The only general and slight exceptions are seen in the channels of small creeks, or "alues" as they are called, which are needed to give discharge to the retreating waters, the rapidity of the motion of which serves to keep such passages open and deeper; and also that the land next the river-side is generally higher than that farthest off, and next to the high lands. The cause of the latter effect is also obvious in this, that the water first leaving the more rapid course of the river, and spreading over the swamp, must necessarily deposit most of its suspended earthy matter first, and carries only the lighter portions to the more remote ground. However, the slope thus made is so gradual, that the difference of elevation is very slight between parts of the same swamp. This general evenness of surface is in a remarkable degree favorable to rice culture, which requires overflowing the crop at a depth as nearly equal as possible.

The trees forming the natural growth and dense cover of such lands are of great size and vigor—principally of tupelo gum, ash and cypress; the undergrowth of cane, and numerous perennial or annual vines and water grasses, serving in summer to make a dense thicket. The earth, always saturated with water, is rendered firm only by its close and deep mat of roots of every description, and but for this would be a quagmire in its natural state, and the more so in proportion to the excess of decomposed vegetable matter in the marshy soil. Also, according to the large quantity and excess of vegetable matter, will be the subsequent sinking of the land, after draining and cultivation. The excess of vegetable matter in any soil, over and above all that is chemically combined with the soil, is liable to rot and waste away. And such must be the case, sooner or later, on all tide marshes, the drying and cultivation of which produces the commencement of rotting, which the before continual wet state of the earth prevented.

All the tide swamps are not capable of being properly subjected to rice culture. There must be a sufficient "pitch of tide," or ordinary variation between the levels of high and low tides, to enable the lands to be, at any desired time, either quickly flooded, or as quickly to have the overflowing water discharged. The latter object is opposed more and more by the freshets the higher the rivers are ascended, so that the upper tide lands are from this cause too precarious for rice culture. Again, salt or even brackish water is fatal to

rice; and therefore the usually fresh water tide lands near the sea are as much in danger of "salts;" that is, of the water, when needed for flowing the crop, being contaminated by salt, owing to a dry season and a scant supply of river water from above. Thus, omitting the upper tide lands, too much endangered by the river being swollen by rains, and the lower lands, too much endangered by salt tides in dry seasons, there remains on all the rivers but an intermediate body of tide lands fit and safe for rice culture.

THE GENERAL MODE OF EMBANKING, DRAINING AND CLEARING TIDE SWAMPS FOR RICE CULTURE.*—When a body of new tide swamp on the Waccamaw or Pee Dee was to be brought under rice culture, the first process has been to cut down and clear off all the trees and undergrowth of bushes, cane, (or reeds), &c., along the course designed for the outer embankment, for the width of about fifty yards, or such distance as would prevent the subsequent cutting down of the remaining large trees injuring the works. In making this clearing, care is taken to leave untouched a margin next to the river-side; which ought to be, but rarely has been, as wide as from fifty to eighty feet, varying according to the irregularity of the water-line. The trees, &c., cut from the cleared space, are moved inward among the standing trees, or far enough to be out of the way both of the outer embankment and the main ditch within and next to it. The site of the outer embankment is then determined precisely; and along the centre of its intended base there is dug a ditch 3 feet deep, 8 feet wide at top, and as much or nearly so at bottom. This digging is for two purposes: first, and principally, to remove all stumps and roots of trees from below the bottom of the future outer embankment, which, if left, would, in subsequent time, by their rotting, cause leaks to be produced; secondly, the earth dug out of this central ditch is laid regularly and closely just outside of its edge, and forms a bank sufficient to exclude the ordinary high tides from covering the land, and troubling materially the main operations which are to follow, for thoroughly embanking and clearing the land. Through this first low bank, at a suitable outlet, there is put in one of the ordinary tide-trunks, such as will serve afterward for one in the finished embankment, and which will serve sufficiently to exclude the high tides, and at low tide to discharge

* For the substance and for all that may be of any value in the following statement and description of rice culture and management, I am indebted to verbal information, which I derived in conversation with practical and judicious rice planters, and principally from Dr. Edward Heriot and John H. Allston, Esq., in regard to the subject in general, and as to the more usual modes of culture and management of rice; and to Messrs. Stephen Ford and S. C. Ford, in regard to "Loggett's" and the "All-Water" plans of flooding and cultivation, as practised on Black river.

any accumulation of water in the area, from rains, springs, or leakage of the low bank.

When carrying around this first ditch and slight embankment, all the low places which serve as outlets of small creeks or "alues" are omitted at first. When all the other parts are finished, these lower parts are undertaken, for which a different and more laborious procedure is necessary. For the length across each such alue, two parallel lines of strong stakes or piles are driven perpendicularly and deeply into the mud, and the lines wider out from the designed large embankment than its two base lines.—"String-pieces," or long horizontal timbers, are placed outside of and against these upright stakes, 2 to 3 feet lower than the designed height of the bank; and these string pieces kept in place, and made to brace and support the lines of stakes, by upright and much stronger and longer piles driven at intervals of 4 or 5 feet outside of the string-pieces, and opposite to each other across the intended embankment; and as high as its top is to be raised, cap or cross pieces, made of round cypress poles 6 or 8 inches through, extend from each of these piles to its opposite pile, securing them in place, and the whole structure together, by mortises in the cap pieces held by tenons on the posts. The embankment is then made within this framework, fully as high as the general level of the small bank, if it be not convenient then to complete the full intended size at once at these low places.

The central ditch being completed, with its bank and the trunk fixed, (its bottom, as in all cases, being even with lowest tide,) the inner and outer lines of the base of the outside embankment are staked off, which is usually not more than 12 feet wide, (and sometimes less,) for a designed height of 5 feet. It ought to be 15 feet, or thrice as much as the height, at least. Within the inside base line of the embankment, stake off another line parallel to it, and 15 feet distant, if the soil be stiff, or 20 feet if light and porous, which space is for the *inner margin*. This width is for the river-side, or exposed parts of the embankment. If along narrow creeks or cross-banks, the inner margin need not be more than 10 to 15 feet. Along the inside of this margin is laid off the main ditch, 8 feet wide and 5 deep, with sides nearly perpendicular.* Out of this ditch all stumps, roots and buried bodies of trees should be entirely removed. But this is not often faithfully done; nor is the ditch always dug 5 feet deep. The earth dug out should be thrown by the ditchers as far as they can toward the site for the embankment.

Afterward, when it has stood long enough to be in good condition, or is neither too wet nor too dry, this earth is thrown by women and other inferior hands to first fill the central ditch, and then to build up the embankment; keeping the earth nearly within the limits of the base. After standing long enough to be somewhat consolidated, the sides of the bank are trimmed to their proper slope, making the embankment 5 feet high, generally, 3 feet wide at top, and as before stated 12 feet (or more) at bottom. The rise of ordinary tide is 4 to 5 feet;* spring tides 12 to 15 inches more. The general level of higher land at first usually above common high tide. If the main parallel ditch does not furnish earth enough to make the bank everywhere, the deficiencies are supplied by digging earth where it can be best spared from the wide outside margin; but care should be taken, if this course can be ever justifiable, at least not to dig any thing nearer than 15 feet from the outside base line of the embankment. Unfortunately this care has been in general practice but little regarded. Generally, too little margin was left at first; and nearly all which was left at first has been since cut away to heighten the embankment, so as to leave it exposed to the winds and waves, and requiring enormous annual labor and expense to oppose the destructive action of storms upon the embankment.

In beginning to bring in any one body of marsh, no matter how large, it is sometimes better to carry the first operations, already described, around the whole, (except the land side, of course,) although the subsequent entire clearing of the forest may require a long time for completion. Of so much of the land as is designed to be cultivated the first year, after the above-described operations, all the cane, bushes, and smallest trees are cut down, then the smaller size only of larger trees, which are lopped, and the bodies cut into lengths of 12 or 15 feet, leaving from 5 to 7 of the largest trees standing in each half acre. At a dry time the next spring, and with a good wind, fire is put to the windward side. The effect is according to circumstances; but it is deemed "a good burn" if all is consumed except the logs. If there is much cane, it serves so well as fuel, that the fire is much more effectual; in other cases much less. The remaining logs are heaped and burnt when convenient; but by some persons often left scattered on the ground for years. The large trees left standing are afterward killed by belting, or taken out for timber as needed for use.

The land cleared should be divided into fields of convenient shape and size, and each

* This is wrong. A wider ditch, with well-sloped sides, would stand much better, and need less clearing out and subsequent repair.

* The greatest rise of tide low down the river—the least highest up—and in proportion between the extremes.

one be separated from the next by cross embankments, and surrounded, except on the sides where joining the high land, by large ditches parallel to the cross embankment. These embankments, being only to keep out of one field the water admitted into another, need not be more than 7 or 8 feet wide at base, and 3 feet high; or 2 feet less high than the outer or main embankment. If, however, they could be as large it would be better; as then a breach in and overflow of the outer embankment might be kept from overflowing all but the first field. The ditches furnishing earth to make them need not be more than sufficient for that purpose, or 5 feet wide and 4 to 5 deep. The margin between the bank and the ditches is 10 to 15 feet wide. Each field thus separately embanked and ditched should discharge and receive its water by a separate trunk connecting with the river or creek. Or if it be a back field not joining such natural outlet, then into a canal confined within two banks, and discharging through a trunk into the river. However, when such a canal is needed (as is usual) for navigation to the barns, &c., as on many plantations, then it is dug 15 feet or more, with margins say 10 feet wide, and in time becomes sometimes 20 to 25 feet, by its sides falling in, and successive clearings. There is no trunk in such case to exclude the tide; and therefore the two banks on the sides must be high and strong enough for that purpose. Sometimes, however, the navigable canal, instead of being always open to the river, is separated from it at its outlet by a flood-gate, wide enough to pass the largest flats used in transporting the crops. This is the better plan, where the canal is long, as it protects the banks on each side of it.

In laying off the land into separately embanked divisions, or fields, regard ought especially to be had to having the surface of each one as nearly equal in level as possible, so that it may be flowed and drained equally. This consideration should have most influence in shaping the fields. As to the proper size, if the level be alike, that depends much on the amount of working force; as no one separately embanked division ought to be larger than the hands can finish any one operation upon in one day. Twenty acres make a very good quantity for the size of trunk used.

The tide trunks used are well planned and constructed for this purpose. The trunk is 4 feet wide by 2 deep. Both ends are cut sloping, so that the bottom of the opening extends 1 inch farther out than the top. The valve or door to close the end, hangs from upright arms rising 10 or 12 feet from the bottom, by long mortises in the arms, or hinges far above the trunk, and closes it by the mere pressure of the water, when higher that side of the

bank than on the other. The other end of the trunk has a like valve. But a great improvement in the trunk, which has not been very long introduced here from Savannah, is to have each gate to be raised by sliding upward, (as a flood-gate does,) as well as to swing open by pressure of water from the opposite end. Thus, a valve can be hoisted by sliding up, by use of a lever, when the tide is pressing the valve to the aperture; whereas, were it merely to open by its hinges, it could not be done until after the fall of the tide on that side, or higher rise of the water on the opposite side. This simple improvement is of great convenience and utility.

When thus embanked, wide ditched, and as yet but very imperfectly cleared, the land is put the next season under rice culture. The then still remaining higher level of the surface, and the open, loose, and permeable texture of the soil, filled as it is with roots and other undecomposed vegetable matter, make this slight drainage sufficient at first, and perhaps for some years after. As the surface subsequently becomes lower, and more compact, by decomposition, settling, and tillage, more close and perfect drainage will be needed. And the natural drains furnished by the former beds of crooked creeks and small "leads" are deepened, and side, or "spring" ditches will then be required, and should be cut 3 or 4 feet wide, along the foot of all the high lands, whence springs ooze out. Afterward, when farther drainage is found wanting, straight drains are cut in each field, 20 to 24 inches wide and 3 feet deep, parallel to the longest straight side of each field, and to each other, discharging at each end into main ditches, and either 300 or 150 feet apart, according to the wants of the land. After another or more crops, the intervals left between these narrow drains are split in two by other similar drains; and again, when needed, others made in like manner to subdivide the land, until these parallel drains are at every 75 feet apart, as is usual lower down Waccamaw island, where the freshets have less effect to flood and low tides more effect to drain, or at 37½ feet, as usual higher up the rivers. The working acre is not the same size, of 4,840 square yards; but, as marked and estimated in all culture in lower South Carolina, is a space of 800 feet by 150, or 5,000 square yards. And thence, the drainage at 75 yards is technically called "quarter draining," and that at 37½ yards as "half-quarter draining." When the drains are very long, it is usually best to intersect them at right angles, by cross-drains, at distances of 3 and 4 half acres apart. With making all these, the general and usual plan of draining is complete; and thereafter, the planter has but to preserve and keep in perfectly good condition for operation, his embankments, ditches, and flood-gates, or tide trunks. And to do this requires continued

care, and annual and great labor, which are increased greatly according to the amount of omissions or defects of the early construction of the embankment, or retaining of sufficient outside margin. Regularly every winter, or as early as may be in spring, all the drains are cleared out, and such of the main ditches as require it; and the mud from the latter used to partially repair the waste of the adjacent banks. The farther waste and defects of the banks, made necessarily by decomposition of the vegetable portion of the earth itself, or by its being washed away by the waves of the river, or of the "flows" dashed against the banks, are repaired by earth from the most convenient places—and generally (and destructively for the future) by cutting away the outside margin, until none is left, and the whole force of the breaking waves is thus allowed to be spent upon the embankment on the river-side. The consequences of this very general error will be again brought into view.

When a considerable leak has been made through the bank is cut through at that place down to the leak, and the passage carefully stopped. When an old bank has by neglect become generally leaky, or admitting oozing water, it is "split" or "centre ditched." A narrow ditch is dug lengthwise along its middle, and down below the leaks, and the opened space is then filled up by "slush," or the soft mud obtained by clearing out the ditches. A better filling material for such a central ditch is used by some persons in the purest sand they can obtain. This prevents the burrowing of snakes, crawfish and other small animals, &c., &c.

RICE—CULTURE OF, ETC.—"Rice is an aquatic plant, and naturally, it may be inferred, its growth was on land always under water, or saturated with it whenever not altogether covered. And under culture, and even when in other than its native region, doubtless rice would prefer the continuance of water. But other needs than the mere supply of food for the plants have to be provided for, which require a dry condition of the soil, at some periods. And fortunately, rice is so hardy that it will grow either under water or on dry land, and with violent alternations of these opposite conditions. It is necessary that the land should be dry to prepare for and plant the crop—also for the purpose of removing weeds, which, being native to the soil and climate, are therefore more hardy than the cultivated crop—and again to reap and remove the matured crop. But it would seem to be the general principle of the culture, that the growing rice should be kept covered with water as much as is consistent with effecting the foregoing objects; and with another important exception to indulging its aquatic nature and preference, which exception is, to

avoid too sudden and thorough changes from the wet to the dry condition, or rather from the effects of those conditions."

PREPARATION OF LAND AND PLOUGHING — "The flooding and drying of the rice land, when new, is conducted much in the same manner as in after time; but the preparation for and tillage must vary, according to the state of the land and its wants, while the stumps, roots, and other superabundant and fine vegetable matters, are gradually rotting away, and the soil consolidating and becoming lower and closer. Passing over the less regular operations of earlier years, let us suppose the latter condition reached; and the proper, and usual course of culture, suitable to this permanent condition, will be now stated.

"We suppose the field to have been in rice the preceding year, and it is never otherwise on new and good land, and very rarely on any—if the land be still new, or the soil loose enough, and sometimes also on old land, many persons, just before planting time, open new trenches for planting between the rows of the last year, the stubble having been burned off previously. But usually, and especially on old land, the whole surface is broken up flush, either by the hoe or the plough. The plough is far from being in general use; nor indeed is it admissible except on well drained land, and also firm land, such as the Peedee swamps. Even in these cases, some object to its being used every spring, but prefer it in every other spring, alternating with breaking by hoeing. This is because fearing to make the sub-soil too close by pressure. The breaking, whether by hoe or plough, rarely exceeds 8 inches deep; the deepest hoeing, done by sinking in the ordinary hoes 'up to the eye,' cannot be more than 4 inches, owing to the oblique direction of the cut. It is aimed to subvert the earth by the hoe; but this is always but imperfectly done, as is shown in the first flow by the quantity of floating stubble and roots, which had been left on the surface. I should have stated that the stubble of the preceding crop is most generally burnt off before the breaking up of the ground, or otherwise is turned in by the plough or hoe. If the birds had not been early enough in coming, and numerous enough to eat up all the shattered grains of the last year's crop of rice, the turning the stubble in, by planting all remaining grains, tends to increase the growth of volunteer rice—which evil, in such case, the other plan of burning to stubble would lessen.

"After the land is dug up, the next process is to 'slush' or clean out all the drains. When planting time draws near, part of the land, say about one third, is 'mashed,' that is, the clods chopped and the surface levelled by hoes. This is sometimes expedited by previous harrowing, but it is not a general practice. The balance of the land is mashed as wanted for planting, and just before the planting.

"The time to begin planting is from March 20th to April 1st. For this, the land having been prepared and made fine enough by the 'mashing' process, just before, the rows are marked off, 18 inches apart, as follows: Having determined on the direction of the rows, which is sometimes with the drains, but by most good planters is preferred across the direction of the drains, a number of rows, say 80 or more, are laid off 4 feet 4 inches apart, by 3 stakes stuck up in each row, the end stakes or 'trenching stakes' not reaching near to the extremity of the field designed to be planted at one time. Guided by these stakes, expert hands 'trench' rows with trenching hoes, about 2 inches deep. These hoes are narrowed to 3 or 4 inches at the edge, and of course open trenches of that width. Next, another hand follows, and by similar trenches splits the intervals, and then splits the halves, thus completing the rows at 18 inches. The expertness of the hands, and the accuracy of their work in these operations, are admirable. The seed is then strewn along the trenches, and scattered as wide as their width, by women. Two and a quarter bushels of good rice (rough, or in its close envelope of chaff) are by many deemed enough for an acre. The seeds are covered immediately, either by rakes, hoes, or covering boards, which are fixed with handles like rakes, and struck on the edge of the row, so as to throw a little earth upon the seeds.

"*The sprout flow.*"—The planting of each field should be completed the day it is begun, and on the next rise of tide, the trunk's outer door is lifted, and the water admitted to overflow the field. It should cover every part; and the depth is not deemed very material, though the shallowest complete covering by water is enough, and perhaps the best for the seed. A deep flow may injure the banks by washing them when the wind blows. Or it may even break an interior bank, if weak, by inward pressure. If the land be very light and loose vegetable soil, the water should be admitted slowly, for fear of washing, or even of floating some of the soil. As soon as a field is completely flowed, and the remains of stubble and other floated trash is wafted by the wind against a bank, it is drawn out by long-handled rakes, and burnt as soon as it becomes dry. The inner valve is closed, when there is enough water on. This first watering is called the 'sprout flow,' and is continued until the seeds 'pip,' or the sprouts burst the envelope of chaff, when the water is drawn off. The time of this flow depends on the warmth of the weather. Sometimes only 4 or 5 days. In this most remarkably cold and backward season, (1843,) some plantings have been under the sprout flow for 14 days, and the seeds have not yet (on April 7th) sprouted.

"*The point flow.*"—After the water has been drawn off, it is necessary to guard the fields from birds. The land remains uncovered and

drained until the plants have risen above ground enough for their fine spires to show like small needles, when viewed before sunrise, while tipped with dew, and when the rows can thus be seen for about 50 yards in length from the banks. Then the water is admitted again to cover the field. This is called the 'point flow.' It serves to protect the seeds from birds, to soften the hard lumps of earth, and to kill the grass, while it does not injure the rice plants. This flow continues from 3 to 7 days, and until the plants are 3 or 4 inches high. If the water be continued longer, the plants grow too slender and long, and will fall on the ground, when the support of the water is taken away—though they will rise again; and even were they to rot off, in that case new leaves will spring out. It is preferable to see the plants thus fall, rather than expose the rice too soon to the depredations of birds.

"As the different fields, or separately embanked portions, are successively planted, (and the planting is usually continued from 4 to 5 weeks,) of course the flowing should follow in like order. Thus, while water is going upon one piece, it may be passing off from another; and the separate but adjacent fields present all the various states of flooding and drying.

"*Planting in 'open trench.'*"—The foregoing description applies only when the plan of covering the seeds by earth is adopted. There is also in general use, and latterly a more extensively pursued plan, of *not* covering the seeds, and which will be now described.* For this mode, before planting, the seeds are 'clayed.' This consists in pouring water in which clay has been mixed and is suspended over a pile of seed rice, which is kept stirred and worked up until every grain is wetted. If this claying were not done, the small and short fibres on the grain would prevent the immediate access of the flow water, and the grains would float, which they cannot do with this treatment. After being 'clayed,' (the effect of which is so slight as scarcely to alter the appearance of the grains,) the rice is dried enough to be distributed easily, and strewed in the trenches as before described. But no covering of earth is given; and as fast as each separate piece of land is thus planted, (or even before the last of it is finished,) the outer trunk door is lifted, and the tide admitted, slowly and gradually at first, to flow the land. The land remains undisturbed under this flow until the sprouts, which are at first white, become green, or the plants rise high enough to 'fork,' or for the first two leaves to

* From a communication to the State Agricultural Society by the Hon. R. F. W. Allston, which has been published since this report was written, I learned that the honor of having first used and introduced this important improvement in rice culture is due to John H. Allston, Esq.

separate, which will be when the plants are one and a half or two inches high, and at from 10 to 30 days, according to the weather. After this, the water is passed off, and the land dried. Floating trash should previously be removed, as before stated. If the surface should afterwards become too dry, the water is admitted to flow in for a single flood tide, to barely wet the soil, be kept shut in during the next ebb, and passed out and again excluded with the first lowering of tide thereafter.

"By this method (of 'planting in open trench') the longer duration of the first flowing unites and brings into one the 'sprout' and the 'point flow' of the covered planting. At the stages now reached by both, it may be considered that the plantings on the two methods cease to differ, and thereafter the crops on both are treated alike, and will be described as one.

"The advantages of the 'Open Trench' plan are the following:

"First: The whole labor of covering is saved, which requires twice as much labor as the strewing the seeds.

"Second: The depredations of birds and other vermin are prevented.

"Third: Most of the seeds of 'volunteer rice,' and other weeds and grass seeds, may be presumed to have been drawn outside of the trenches in opening them; and instead of being again drawn back into the drills of rice in the earth, as must be done when the rice is covered, these seeds remain and grow outside of the drills, and may afterwards be more easily destroyed by hoeing or pulling out.

"Fourth: If a freshet of the river compels the water of the 'sprout flow' to be kept up much longer than the prescribed termination, the covered rice is apt to rot; of which there is no danger on the 'Open Trench' plan. The cause of this important difference is not understood—though it is supposed to be the beneficial influence of light in the one case, and its exclusion in the other.

"There are also countervailing objections to the 'Open Trench' plan, which will be named:

"First: The long continuation of the water (which sometimes, in easily plantings or backward seasons, may extend to 25 or 30 days) promotes the growth of water grasses.

"Second: In light soil, the loose mould may be so moved by the agitation of the water by high winds, as to cover much of the seed unequally and too deep.*

"Third: The same operation is injurious to ditches and drains, by carrying soft earth into them.

"And fourth: By the dashing of the waves

washing the sides of the banks, which last is the greatest defect in the plan.

"The balancing of the advantages and disadvantages of the 'Open Trench' plan prevents either that or the other mode being generally adopted exclusively. It is deemed best to choose between them according to circumstances; and usually to plant and cover in part of the fields, say for about one third of the crop, and to leave the balance in open trench."

FIRST AND SECOND HOEINGS, AND THE "LONG FLOW."—"The rice, (on both the foregoing plans of planting,) from the removal of the water, as already stated, remains dry until the plants have acquired enough size and strength to resist the pressure of the light earth as falling from the hoes. Then the intervals between the rows are hoed, by chopping short and shallow, suited to the then low state of the plants, and care should be taken not to cover the plants by clods; and all clods left previously on the plants should be cleared off at this hoeing.

"The rice land is left dry from the first hoeing until after the second, which is to be given from 14 to 18 days thereafter. The second hoeing is given a little deeper than the first; and any large weeds or grass then distinguishable in the rows are pulled up. The rice then has 3 leaves, and is 6 or 8 inches high. If in dry weather, the land is left dry a day or two after this second hoeing, for the uprooted weeds to die, before the next water is turned on; but if wet weather, the land is flowed immediately. This is the 'long flow.' The water is raised at first above the tops of the plants, so as to float off trash, bugs, &c., which floating stuff will be driven by the wind into corners of the fields, and should be gathered up and removed. Then the water is lowered, so that if the surface of the field be as level as usual, (and as it ought to be,) the tips of the plants are then seen above on the highest parts of the field. Then the water is lowered very gradually, and during several days, until the tips of about two thirds of the plants of the entire field, or division of land, are above the surface of the water. The flow is then kept stationary at this precise height (which is fixed by making and observing marks on the trunk posts) for a duration of from 10 days on the lightest land to 20 on the stiffest, when the water is again entirely drawn off, which closes the 'long flow.' This is the most important flow, and its execution requires judgment and careful attention. At this critical period, a field of rice may be much injured either by too deep flowing, or by suddenly lowering and taking off the water. If the flow be continued too long, or the water be drawn off when the roots of the rice are in an exhausted condition, the plants will 'fox,' or take a reddish-brown tint.

"Some planters change the water during

* This objection may be easily obviated by letting the loose pulverized mould settle before sowing the seed. A rain will effect this purpose; and without rain, it may be done by turning in water for a single tide, and drying just before sowing the rice.

this flow, preserving the same level, but others object to it. If the same water is continued, it ferments, and a frothy scum rises, which, being collected by the wind in particular spots, will adhere to and kill the plants. To prevent this, in such places the water is beaten or agitated, which causes the scum to break and sink to the bottom."

THIRD AND FOURTH HOINGS, AND THE "LAY-BY FLOW."—"When the earth has become dry, the third hoeing is given, still deeper than the preceding, and afterwards each hand passes over his task, and pulls the grass out of the rows. The field then remains untouched and kept well drained until the plants are about to joint, when the fourth hoeing is given, light, and pulverizing all large masses left by the preceding deeper digging. The water is then again put on, and kept at about the same height as during the preceding 'long flow'; and this is maintained until the rice is fully headed, and the blossoms dropped. The water is then raised as high as may be done without danger to the banks. It serves to support the plants, and prevent their being laid or tangled by high winds. This entire flowing is termed the 'lay-by water,' it being the last. It should have been mentioned that during the early and low stage of it, there is a distinct operation of the hands passing over the ground with baskets, and pulling out as much as possible of the volunteer rice, tick-grass, and other weeds, which would, if left, by admixture, injure the quality of the grain. The volunteer rice is carried off; and all other weeds are knotted together in handfuls and trodden in the wet earth under water, so as to be certainly killed. These two operations are performed at different and the most convenient times during the flow."

HARVESTING.—"The rice ripens usually from the 1st to the 10th of September. When all the grains are hard, except the lower two or three at the bottom of each head, (though the stem and leaves are quite green), the crop is ready for reaping. And when the time for the commencement of reaping is determined upon, the water is drawn off of the field just the day before, or it may be best the preceding ebb tide; and the reaping may be begun when the flow has not yet entirely passed off. The reaping is performed by the sickle. Each hand usually carries a breadth of three rice rows. Some planters have four rows carried. The stubble is left about twelve inches high—or higher if of rank growth. The reaped rice is laid in handfuls as cut, in rows, on the stubble, to cure. The stubble is abundantly thick to thus support the rice, unless the growth is very thin, or has partially failed.

"All the rice reaped from morning until noon of one day, is usually enough cured to be sheaved by noon the next day, and removed to the barn-yard before night. The

test of its being dry enough, is when no juice can be made to exude from the joints, when twisted together by strong pressure. The rice is then bound or tied up in sheaves, as large as single lengths of the reaped rice will serve to tie around. The sheaves are generally made smaller than this. The sheaved rice is immediately carried to the barn-yard on the heads of the laborers, if near enough, or by water in large *flats*, if far from the barn. It is there put up in small cocks or ricks, to remain until dry enough to be put into larger long ricks or larger round stacks, to remain until taken down for thrashing. The mode of putting up the rice in the ricks or stacks cannot be well made clear by mere description. The execution, however, is excellent, and of the round stacks is admirable. The latter is the best mode, when well performed. The loss or injury of the grain by the exposure before thrashing, is not usually considerable, when the ricking or stacking has been well executed."

VOLUNTEER RICE.—"What is called 'Volunteer Rice' is the product of grains scattered at the previous harvest, and which remain on or under the surface of the ground through winter, and come up with the next planted crop. By this long exposure to cold, wet and overflow, as would occur in a state of nature, it seems that the plant is disposed to revert from its artificial character and qualities, as before improved by culture, to its previous natural character and habits. At least this is the only reason that I can conceive for the singular production and qualities of volunteer rice. The plants thus produced, and also the product of their seeds, as generally believed, if saved with the crop and planted, become intermixed with the good seed, have grains with a red anterior skin or pellicle, instead of white, as of ordinary and good rice. There are four different and common kinds of volunteer rice, and even different varieties among each of these, in the lighter or deeper tint of redness, or less or greater thickness of the red pellicle. These four kinds of red or volunteer rice, all agreeing in having a red pellicle, are distinguished as follows:

First. White chaffed samples.

Second. With white chaff, having a black point, and spike to one end of the chaff. This is the ordinary and general kind.

Third. With yellow chaff, and having a long point.

The seeds of all these three fall off so easily, as rarely to be harvested and brought to the barn-yard; and especially the last, which drops its seed before they seem ripe.

Fourth. With yellow chaff, and like the last, except that the seeds do not fall off in the field, and the grains cannot readily be distinguished from good rice, while the chaff remains unbroken.

"All these, except the last kind, may be

distinguished in the field before maturing the seeds, and by using care and labor enough, the plants pulled out and destroyed. But the last kind cannot be known either on the stalk or in the chaff. But with all the care used to keep land clear of red rice, it continues more or less infested with all the kinds. And though the grain is not the worse in any thing but some slight remains of red tint, so despotic is Fashion in the market, that a crop of rice loses greatly in appreciation if thus showing many grains of volunteer rice. I have been informed that in Italy the admixture is not regarded by the buyers for home consumption. The plants of volunteer rice are usually the most hardy, thrifty and luxuriant of the crop—which helps to confirm the opinion that it is rice approaching more nearly to its natural and hardy character.

"As there are different varieties of cultivated rice, it is probable that to this difference of origin may be owing the different kinds of volunteer rice. A white chaffed rice was formerly generally cultivated, which has been universally substituted by the 'gold seed' or yellow chaffed rice.

"The circumstances stated require great care to prevent as much as possible the growth, and still more the increase of volunteer rice, which is indeed a very injurious weed to the crop; both because its own product (if it were worth any thing) is mostly lost to the crop, and moreover that what of it is saved serves to contaminate the seed, and lower the quality and market price of the crop for sale."

RESTING AND MANURING RICE LAND.—"The cultivation of rice on embanked marsh lands is generally continued year after year, for a long time, without cessation or rest to the land. But rich and deep as is the alluvial soil, it becomes tired and gradually less productive under this unceasing and unchanged production of rice, and it is found profitable to give rest, and also manure, to the land when long cultivated. Most planters, who have land enough, give a year's rest at distant intervals, and always find a profit from it, in the increase of the next year's cultivation. It may be doubted whether this increase may not be truly ascribed in part to the alternation or change of growth, as well as to the improvement of fertility. Mr. John H. Allston rests his land (which is clay soil on the Pee Dee) for two years together, keeping it dry during the time, and he finds that this, if done once in 10 or 12 years, will add 50 per cent. to the next crop, or raise it from a previous product of 40 bushels to 60 per acre. Manuring with the rice straw is also practised with advantage by those planters who have no high-land or other culture, or not enough to require the straw as manure. Dr. Heriot is one of these, and has lately

applied his rice-straw to fields thrown out of rice culture for that year, and cultivated (dry, of course) in cow-peas. This change and manuring he has found to double the next crop of rice. Colonel Belie has, by manuring and rest, made upwards of 90 bushels of (rough) rice to the acre. Both he and Dr. Heriot own and raise on Sandy Island, of which barren sandy soil is their only highland, and on which their manure was before entirely thrown away, or left to rot in waste, without producing the most transient productive power."—*Ed. Ruffin.*

RICE IN SOUTHERN STATES, ETC.—Col. Ward, of South Carolina, says that, in 1845, he planted a field of 16 acres in rice of two different kinds, known as long and small grain. The long grain produced rough rice 376 bushels, making clean rice 10,754 lbs., worth \$404 67, and a residuum of 519 32, or 16 bushels and 7 quarts of small or broken rice, and 31 bushels of flour. There was then, per acre of merchantable rice, 1,344½ lbs., worth \$50 58 per acre. The small grain produced 348 bushels rough rice, making 12,767 lbs., worth \$404 56. There was, then, per acre, 1,345½ lbs. of merchantable rice, worth \$50 87, and a residuum of 16 bushels and 23 quarts of broken rice and 33 bushels of flour.

In 1846, Dr. E. T. Hewitt planted a field of 25 acres in alternate beds, as in the foregoing case. His results were, long grain, 392 bushels rough rice, making 12,099 lbs. clean rice, or 968 lbs. nearly, per acre, worth \$48 81 to the acre, and a residuum of 4½ bushels of small rice and 40½ bushels of flour. The small grain produced 381 bushels, making 11,065 lbs. clean rice, being 885.2 lbs. to the acre, and worth \$39 51½ to the acre, with a residuum of 5½ bushels of small rice and 37 bushels of flour. It is scarcely necessary to remark, that these small residuary portions of the unmerchantable product are used on the plantations, either as food for the hands or the stock upon it.

It is also of value to note the rate, per pound, at which the rice appears to have been sold:

	Pounds.	Value	Rate per pound.
First parcel, long grain,	10,754	\$404 67	3½ cts. nearly.
Do. do. small,	10,767	404 56	3¾ " "
Second parcel, long grain,	12,099	547 02	4.44 cts.
Do. do. small,	11,065	493 06	4.46 " "

This will give an average price of 4.09 cents, nearly, for the varieties, as stated, per pound, in the two years 1845 and 1846, and an average money product to the acre of \$45 14 nearly, an average product in bushels of rough rice of 86½ nearly, and an average product of merchantable rice of 1,090 lbs.

The highest price per pound is 4.46 cents, the lowest 3½ cents; the largest product per

acre of clean rice is 1,842½ lbs., the smallest is 885.2 lbs.—making the product of the first 50 per cent. larger than that of the second, per acre of clean rice; and, therefore, it is reasonable to suppose that the latter was no more than a common crop, even if the former were an extraordinary one, and hence making it a safe basis to make calculations upon.

Are there not, among your readers, some Carolinians and Georgians, who would be able to enlighten the public on the mode of culture, cost of it, and the probable results? I am persuaded that the southern part of the United States, by a proper direction of labor and capital, could monopolize the supply of rice as it now does of cotton, and thus add another strong item to the strong influences she now possesses on the commerce and destiny of the world, and render her institutions more safe and her property more profitable. Could the vast quantities of rich marsh lands that exist on our Atlantic and Gulf coasts be converted into rice fields, a very extensive opening would be made for an additional application of slave labor, and consequent security and advantage to our section of the country. But the cultivation of the low-land rice need not be confined to the coasts and marshes of the Atlantic, the Gulf and the Mississippi. Throughout the south there are tens of thousands of acres susceptible of being flooded by springs and perennial streams, far in the interior, and capable of producing the most heavy crops of rice at the smallest cost, either for land preparation or culture, and in portions of the country the most healthful and inviting.

The mode of cultivating rice in China, noticed in the Patent Office Report for 1847, page 173, is peculiarly applicable to the interior of a great part of the southern country. The large flats along small streams, capable of being dammed and thrown over large tracts of lands, and the springs that so generally issue from the hills that border these flats that may so easily be turned upon them, render flooding, in many places, a work of the smallest possible cost, and of the utmost safety and security.

RICE ESTATE OF GOV. AIKEN, OF S. C.—While upon the subject of rice, we cannot refrain from introducing, from the *American Agriculturist*, the sketch of a visit, by Solon Robinson, Esq., to Jehossee Island, the magnificent rice estate of Ex-Governor Aiken, of South Carolina. We have ourselves frequently passed this plantation, between Savannah and Charleston, and know that it is one of the most perfect in the world:

This island contains about 3,800 acres, no part of which is over ten or fifteen feet above tide, and not more than 200 to 300 acres

but what was subject to overflow, until dyked out by an amount of labor almost inconceivable to be performed by individual enterprise, when we also take into account the many miles of navigable canals and smaller ditches. There are 1,500 acres of rice lands, divided into convenient compartments for flooding, by substantial banks, and all laid off in beds, between ditches three feet deep and only thirty-five feet apart. Part of the land was tide-water marsh, and part of it timber swamp. Besides this, Gov. Aiken cultivates 500 acres in corn, oats, and potatoes; the balance is gardens, yards, lawns, and in woods, pasture and unreclaimed swamp. Wood is becoming scarce on the island—so much so that he drives the steam-engine, to thrash the crop, by burning straw, which answers a good purpose, but is of doubtful economy; though he intends carefully to save and apply the ashes, which are very abundant, and note the difference, in value, between that application and the manure made from the decomposed straw. It is generally calculated that two thirds of the straw will be sufficient fuel to thrash the crop, but Gov. Aiken has not found it so. He says there is no more danger of fire in the use of straw than in any other fuel. The flue is carried off fifty or sixty feet along the ground, and there rises in a tall stack that *never emits any sparks*. Sugar planters, and all farmers who use steam, may do well to notice this. I recollect Mr. Burgwyn carries his off from his barn in the same way, with the same effect.

Governor Aiken, however, has one improvement that I recollect mentioning to Mr. B. he would require; that is, a "man hole" into this flue, to enable him to clean out the great accumulation of cinders at the bottom of the stack. In Gov. Aiken's there are two, which are closed by iron covers.

The thrashing apparatus is a most convenient one. The sheaves are brought from the stacks in the great smooth yard to a large shed where all the sheltered grain can be saved, and are there opened and laid on carriers, similar to cane carriers, which carry them up to these machines in the second story, where the grain is separated from the straw, and falls down into winnowing machines, from whence it is removed by hand (it might be carried by machinery) to another part of the building, over a canal, and is let down into boats to carry it about half a mile to the hulling-mill, which is exactly like Col. Carson's, and driven by tide. It is carried from the boats to the mill by hand, or rather head, where a little head-work of another kind would take it up out of the boat by elevators.

The straw is consumed almost as fast as thrashed. And here the saving of labor in getting wood, as well as the saving of labor

in stacking the straw and hauling manure, must be taken into account, as an offset to the loss of manure in burning the straw.

The rice, for seed, is always thrashed by hand, as experience has taught that the vitality of a considerable portion is injured in the thrashing-machines. *It is just so with wheat.* [An experienced farmer thinks about one grain in 500 is injured by thrashing with machines, and, as about six per cent. by the last process, there is still a great pecuniary advantage in favor of thrashing with a machine.—Eds.]

The quantity of seed to the acre is two to three bushels, planted in drills fifteen inches apart, opened by trenching ploughs; and, singular as it may sound to some other rice planters, Governor Aiken ploughs all of the land that will bear a mule or horse, of which he works about forty, and twenty oxen.

Corn is generally planted in hills, upon the upland part of the island, which is sandy, four by five feet, two stalks in a place, and yields an average of fifteen bushels per acre. Corn, upon the low or rice land, does not yield well, though it makes very large stalks. With sweet potatoes, on the contrary, the low land produces nearly double, and of better quality, averaging 200 bushels to the acre, and frequently 400 bushels. The average yield of rice is 45 bushels to the acre, and upon one eighty-acre lot the average yield is 84 bushels. The crop upon that lot, last year, was 5,100 bushels, weighing 234,600 lbs.; that is, 46 lbs. to the bushel. This made 229 barrels of whole rice, two barrels of middling, and two and a half barrels of small rice, which, at 600 lbs. each, (probably about 20 lbs. below the average,) would make 140,100 lbs. This, at three cents, will give the very snug sum of \$4,203 for the crop of 80 acres.

The average annual sales of the place do not vary materially from \$25,000, and the average annual expenses not far from \$10,000, of which sum \$2,000 is paid the overseer, who is the only white man upon the place, besides the owner, who is always absent during the sickly months of summer. All the engineers, millers, smiths, carpenters and sailors, are black. A vessel, belonging to the island, goes twice a week to Charleston and carries a cargo of one hundred casks. The last crop was 1,500 casks; the year before, 1,800, and all provisions and grain required made upon the place. Last year, there was not more than half a supply of provisions.

Like nearly all the lower-country plantations, the diet of the people is principally vegetable. Those who work "task work" receive, as rations, half a bushel of sweet potatoes a week, or six quarts of corn-meal or rice, with beef or pork, or mutton occasionally, say two or three meals a week. As all the tasks are very light, affording them nearly

one fourth of the time to raise a crop for themselves, they always have an abundance, and sell a good deal for cash. They also raise pigs and poultry, though seldom for their own eating. They catch a great many fish, oysters, crabs, &c.

The carpenters, millers, &c., who do not have an opportunity of raising a crop for themselves, draw large rations, I think a bushel of corn a week, which gives them a surplus for sale. The children and non-workers are fed on corn-bread, hominy, molasses, rice, potatoes, soup, &c.

The number of negroes upon the place is just about 700, occupying 84 double frame houses, each containing two tenements of three rooms to a family, besides the cockloft. Each tenement has its separate door and window, and a good brick fireplace, and nearly all have a garden paved in. There are two common hospitals and a "lying-in hospital," and a very neat, commodious church, which is well filled, every Sabbath, with an orderly, pious congregation, and service performed by a respectable Methodist clergyman, who also performs the baptismal, communion, marriage and burial rites.

There is a small stock of cattle, hogs and sheep, kept upon the place for meat, which are only allowed to come upon the fields in winter, under charge of keepers. The buildings are all of wood, but generally plain, substantial and good. There is a pretty good supply of tools, carts, boats, &c., and the land is estimated to be worth \$100 an acre, for the rice land, which would be, \$150,000
The 500 acres upland, \$25 per acre, 12,500
The negroes, at \$300 each, 210,000
Stock, tools and other property, say, 7,500

\$380,000

which will show rather a low rate of interest, made from sales of crops, notwithstanding the amount of sales look so large.

Now, the owner of all this property lives in a very humble cottage, embowered in dense shrubbery and making no show, and is, in fact, as a dwelling for a gentleman of wealth, far inferior, in point of elegance and convenience, to any negro house upon the place, for the use and comfort of that class of people.

He and his family are as plain and unostentatious, in their manners, as the house they live in; but they possess, in a most eminent degree, that true politeness and hospitality that will win upon your heart and make you feel at home in their humble cot, in such a manner that you will enjoy a visit there better than in a palace.

Nearly all the land has been reclaimed, and the buildings, except the house, erected new, within the twenty years that Governor Aiken has owned the island. I fully believe that he

is more concerned to make his people comfortable and happy, than he is to make money.

RICE OF THE UPLANDS.—A correspondent of the Pendleton (South Carolina) Farmer and Planter communicates the following particulars of experiments in cultivating Upland Rice:

Say to Broomsedge, that some planters in Williamsburg planted their cotton lands all in rice last year, and tended in the same way as they would cotton, and were successful in a crop, and think it is better business than five or six cent cotton. I would say, for my own part, that rice is very easily made. Plant it from two to three and a half feet apart in drills, and keep the grass out of it. If seeded from the 15th of March to the 15th of April, there will be a good crop obtained, if the season is not too dry in August and September. When I say good crop, I mean from twenty-five to sixty bushels to the acre. The tide way of planting is quite different, because the lands are rich, and convenience of water makes it mature better. The tide-water growers plant from eight to fifteen inches in the drill, and sow at least two bushels to the acre. For our up country, from one peck to one half bushel is quite enough. I made this year from two acres about seventy-five bushels of fine heavy rice—seeded and tended precisely as cotton.

Another writer says: Some four years since, I cleared a piece of land, through which there ran a branch in my skirts of land too wet for corn; on these necks I sowed rice, in rows where I could make them, and where too wet to make rows, I sowed broadcast, none of which received any culture, and yielded a barrel of clean rice, at the rice mill of T. Gasaway, some six miles from Pendleton. My second effort was with the upland rice; I planted between the drills in my corn (on land known here as second bottom) about three half pints; this was worked as my corn, the product one and a half bushels from the thrashing machine. My third effort was made this summer, both on lands rather wet for corn, and on that of the most elevated lands on my farm; I planted the wet lands in drills, three and a half by one foot, which was worked as my corn, and made as good rice as I have ever seen; that on the highlands was planted between the drills in my corn—it was feeble when young, and required care in its culture, yet I am of opinion it yielded more food for my family than the corn of the same field.

The grain of rice is not all that is useful; the straw being soft, is easily cut by the knife, and masticated by the horse and cow, of which they are extremely fond. My mode of freeing the rice from the straw is the same as that used in thrashing and cleaning wheat.

RICE PRODUCT IN LOUISIANA.—It was with much pleasure that I perused an article upon the subject of Rice in one of your numbers; a product that has latterly been diminishing, I think, in this state, the lands being bought up for the perhaps more lucrative crop of sugar. Though not quite so heavy in its gross amount as our two great staples, yet not an inconsiderable portion of our large parish, (Plaquemine,) and other parts of the state, are devoted to its production. This crop is more to be valued, as it is within the reach of the middling and poorer classes, giving to them a neat and comfortable support, and to many a handsome revenue. But little capital is required in its cultivation, and it constitutes a particularly healthy food in damp southern latitudes. The consumption of it is immense; and from having been used a short time past in this county as a luxury, it is now to be found on all well-arranged tables in the Union.

In regarding the expensive and laborious works of a South Carolina rice plantation, one accustomed to the manner of its cultivation here cannot but be struck with the very small difference in the yield, and the vast difference in labor. The quality, however, is different. South Carolina rice commands from one half to three fourths of a cent here more than Louisiana. This arises from two causes—the Louisiana rice not being as white, and the grains being more broken than the Carolina. Both of these faults, I believe, can be remedied by cultivation and improvements of machinery. I hoped to have seen in your article on the subject, the reason that some rice breaks more in cleaning than others. The difference in whiteness, I am aware, proceeds from the inferior manner of preparing it for market. Can you not point out the means of remedying the former defect, which must proceed from the culture? These are the two objectionable things against Creole or Louisiana rice. It is, however, much sweeter, and not so apt to get musty as the imported. I have heard exactly opposite reasons given by the planters here for the first of these faults. Certainly the improvement of a crop so important to a large number of the inhabitants of our state, tending to the division of our farming labors, a result most anxiously to be desired, from the low prices of both sugar and cotton, should occupy most particular attention.

The rice crop, from the great care with which it is made here, the extreme richness of the land, the adaptation of the climate to it, and perhaps, it may be, the enervated habits of the people generally, has never been fostered or reduced to a science, as in other countries, where the soils are poorer and climate worse. I have conversed with many intelligent South Carolina planters and managers of plantations, and they all agree that the land is suitable and climate proper to vie here with Carolina,

in both quantity and quality. There is this difference in favor of the cultivation of rice in Louisiana, on the borders of our rivers and tributaries:—It is well known that in Carolina, on the rice plantations, the water used is tide water, with little or no current, and the swamps large; that the water lies on large districts, sometimes drawn off, at others let on, leaving great fields subject to the influence of a burning sun, creating malaria, and engendering the worst kind of disease, insomuch that the planters yearly leave the country for the cities, where smoke and fires, or some other causes, seem to dispel the evil.

Such is not the case here. It is a well-known fact, that the rice plantations, both as regards whites and blacks, are more healthy than the sugar and cotton. From what cause does this arise? has been often asked by many. With the same hot sun and climate, and occupying a district of thirty to forty miles on both sides of the river, with but two or three sugar plantations, at long distances, there exists almost one undivided rice-field, making on an average about thirty thousand barrels of clean rice yearly, and overflowing the whole country around them, except a few front acres, generally appropriated to corn and potatoes. There can be but one cause for its health. The fall of the land is abrupt to the bayous and lakes behind, and the sea being near, at the time the Mississippi is high the rice is at the watering stage, and the water here not being taken off at all, is kept constantly running from the river back, preventing the back-water from ever becoming stagnant, and carrying off, with the rapidity of its current, the vegetable matter that in decomposing causes malaria. The water, too, being drawn off as so late a date, the land does not dry sufficiently early to cause decomposition, before the cooler and stormy months come on and disperse it. Most certain it is, that no country so thickly settled in southern latitudes as the rice-planting part of the parish of Plaquemines, has a greater amount of healthy people and fine children. Why is not more attention paid to the improvement of the cultivation and manufacture of this valuable and lucrative staple?

The rice planters, as a body, generally consist of those who have but small farms, not wealthy, and hitherto almost entirely uneducated, and unable, from the smallness of their means, to vary their crops from their general routine; and not having the capital to put up sufficiently valuable machinery, and to properly prepare their crops for market, nor yet to get out more than ten to twelve barrels a day, they have never progressed since their commencement. This, too, while our other staples have advanced beyond the most sanguine expectations; having, at this present moment, we may say, stocked the whole world.

The common system of rice-planting here,

is to begin in February to dig out the ditches, which, in a farm of four acres front on the river, consist of one ditch, four feet wide or more, four to five feet deep, running from the river to the swamp, with a dam or gate behind, at right angles, to this main ditch. At every half-acre is a two-foot cross ditch, with a bank behind it to confine the water about a foot high, or more. At the back of the field is a four-foot ditch running parallel with the river, with a high bank on the outside to completely dam in the field, with a flood-gate opening behind to gauge the height of water. When March arrives, all the ditches having been opened, they commence ploughing, mud or not, rain or sunshine, if the oxen can go through it. There are generally six oxen, two drivers, and one to guide the plough. The work is generally, where the land is dry, well and neatly done, with the old Roman plough, by us called the French sock plough, the best in the world for stiff land. I have tried such land successively with the centre draft of Jacobs, Cary, and others, none of which could equal this with the same team.

The planters sow and harrow in the rice in succession, as they can generally water the back cuts first, being lower than the front; and in the early part of the season, the river is not high enough to water any but the back, which covers up first, and is ready sooner for the water. The rice is sown broad-cast, about three fourths of a barrel to an acre. I have often seen the planters harrow it in with oxen, knee-deep in mud. As soon as the back rice comes up, they put on a little water, just leaving the heads out, to check the weeds and grass; and from this time out it is kept in water, always leaving the heads out until ripe for cutting, at which time all the water is drawn off, or a little before. When the rice comes up, the weeds and grass also appear; the grass is kept under by water, but not so the weeds, and a kind of grass having a thousand seeds, that sometimes takes almost entire possession of the fields. These have to be carefully eradicated with the hand, pulling them up frequently, knee-deep in water. The process produces disagreeable effects on the legs, but is avoided by greasing them before going in, in the morning. The hands weed about one quarter to one third of an acre per day, and sometimes one-half or more, as the weeds are more or less bad, thick pulling them up by the roots, which readily yield. So quick is the vegetation of rice, that one weeding is enough; but from the slowness of the operation, the last part of the crop is very full of weeds before they can get to it, and sometimes, should the water fall too soon, it is much injured by being choked by them. Here is, I think, one of the faults of the cultivation by the present mode. I will presently point out the mode of avoiding this disaster. The crop being finished, and the weeds taken

out from the rice, they spend a short time preparing latania strips from the woods, to tie up the bundles, which they do in the field as it is dried. This is generally in July or August, when a man or two is hired to assist, and then, with the sickle, the rice is cut down very neatly, about one half to three quarters of an acre a day, as it may be, better or worse, standing or blown down. It dries one day in the sun. It is then tied in bundles, and put in small stacks in the field convenient to the cutters, without stack-poles. The grain is turned inside and the stem outside. When all is cut down and stacked in three small stacks, they arrange their grain-yards and begin hauling in; the first cut being hauled first, and so on, until all is stacked at the house. The blocks are about three feet from the ground, and the stacks are made regular to hold about twenty barrels clean rice. They are well pointed, without poles, and topped with latania. By stacking first in the field in small stacks, the first sweat is passed through, and when it is opened and hauled, it is stacked a second time; it then becomes aired, and dries perfectly, and keeps for years without mould or mildew.

When rice is wanted for the mill, eight or ten tackeys, or small horses, are tied one to another to a post; the rice is placed on the ground about three feet deep, the heads up, and the animals are made to trot around, occasionally shaking up the rice. In this way about twenty barrels per day are usually trodden out. It is then turned in a small hand-mill of wood, like a common corn-mill, and partially hulled; then placed in a mortar, or four mortars in a row, where the like number of pestles pound it till the balance of the hull, and a skin that has a yellow appearance, are taken off. When it is fanned and freed from the chaff by this process, about seven to eight barrels a day is cleaned and prepared for market. This is, as yet, the largest amount averaged, I believe, in a day, except by a small steam-mill once started here by an engineer, which got out about twenty barrels a day; but the prejudice was so strong against that mode of cleaning, that the mill could at last neither buy, nor get rice upon toll, and was abandoned.

It is by preventing the weeds in the rice that its more extensive cultivation can be conducted, a better article produced, and the worst part of the labor avoided, allowing the worker to make more to the hand by a considerable quantity. It is here, generally, the rice planter fails; the weeds and grass catch him, and he loses much of his yields. He has also a worse quality of rice. I have recommended the following cultivation to several planters, but have been told that enough is made by the present process, and why should our alteration be adopted? The reason the weeds are so bad and the grass so troublesome,

preventing the cultivation of so many acres properly, is that the ground is broken up in the spring after all the grass begins to grow, and the rice being planted immediately in succession, the roots of the grass and weeds never lose their life, but go on growing immediately, and get ahead of the rice, which has to sprout, and is at first delicate and slow in starting. These roots can be killed by starting the ox plough in October and November, and ploughing all the land deeply during those months, the roots of the grass being turned up and exposed to the frosts of winter. Ditch in December and February, and then, with three horse ploughs in March, the already pulverized ground can be turned up and knocked to pieces, and harrowed over with a light horse harrow; then sow the rice and harrow it in lightly, keeping the ground as dry as you can; now you may moisten it with water slightly, and the rice will all come up and require little or no weeding. The quality will be better, and the quantity certainly considerably increased. By this process also, the old residuum on the ground will, being ploughed in early, be well rotted, and assist the vegetation of the crop. The consequence of this fall and winter ploughing would save the like amount of work in the water at our most unhealthy season, and in the most valuable time to the planter. The weeding being light and early over, the preparations for cutting can be sooner made, the crop gathered in in good time, and I have no doubt that, instead of seven and eight barrels, ten and twelve can be made to the acre, and a much easier crop.

If the Carolina mode of working by drill were tried properly, I have no doubt it would be found advantageous here as it has been there. I have tried fifteen or twenty acres many years ago in that manner, and found it do well, yield well, and the rice was of good quality. I had no difficulty, with a good canal, in taking the water off and on when wanted. I hoed it the same as corn, and then let on water again. It is said that water had better be kept on until the rice is nearly ready to be cut, as it makes the stalk tender, and prevents it from breaking. In case of blowing down, many say if they make very heavy crops they cannot take them off. This is applicable to all southern crops; more hands have always to be hired in harvest, and it is a poor excuse.

There is no reason why Louisiana rice should not be as good as any other, and yield as much, except bad cultivation and worse manufacture. There is an immense amount of valuable rice land in the lower part of this parish, near the sea-shore, on the river, very cheap, and far more valuable in proportion to their quantity than any other lands in the state. They have the advantage of climate for sugar, rice, or cotton. The net product of

a common acre of land in rice, ready for sale, is eight to ten barrels. The common price is seven to eight dollars, sometimes five and ten dollars, per barrel. The acres planted per hand are eight to ten, and as many as fifteen, sometimes, by the inhabitants of this neighborhood.

RICE CULTURE IN THE EAST INDIES.—Rice—*Oryza sativa*.—Dr. Roxburgh considers that the wild rice, known as *Nivari* in Sanscrit, as *Newaree* in Telinga, and as *Arus* in Arabic, is the parent from whence have sprung all the cultivated varieties, of which he says 40 or 50 are known, but Baboo Rhadakant Deb enumerates 120.

It must not be supposed that these are all permanent distinct varieties: many of them are doubtless the same variety which is mentioned in the list by other names; and others are similarly mentioned by several titles, though only casually altered in appearance or quality by being grown on different soils, or at different seasons. Whether grown in a cold or tropical latitude, must effect a great change in the appearance of a variety gradually introduced from one climate to the other. This must occur to a greater extent with rice, perhaps, than with any other cultivated crop. Thus we see it growing in the plains of the most equatorial districts of Hindostan; and we find it in the lofty mountains of Joomla, towards the Himalaya, in Nepaul, where it sustains, without suffering, the circumstances of frost and snow. Dr. Wallich says, "It was sent to England about the year 1820; it vegetated there most vigorously, but was sown too late to permit its ripening its produce.* Still further north, and at a greater elevation, it yet continues fruitful. A kind of rice is grown on the terraces cut into the sides of the Himalaya mountains.† In the interior of these mountains, barley is not sown until May or June, and reaped in August or September; while on the exterior ranges, the harvest is gathering in, at the very time the seed is sowing in the interior, or at greater elevations. It is at this period that the rice is sown in places within the influence of the rainy season, which extends from about the middle of June to the end of September. In some places rice is irrigated, and in others it is not; but rain falls very frequently, and the air is always in a moist state from being charged with moisture from the heated valleys, and depositing it on the mountains, when it reaches an elevation where it becomes cooled below the point of saturation.

Soil.—Rice delights in a fertile soil: some

varieties require the soil to be constantly flooded, and then it ought to be silicious; others require upland aluminous lard, but in either case it must contain a more than usual quantity of decomposing animal as well as vegetable matter; and whatever may be the mode of sowing or planting adopted, the soil cannot be reduced previously to too fine a tilth.

Manures.—The small quantity of dung applied by the native cultivators to this crop will be noticed incidentally when considering the modes of its insertion. No doubt can be justifiably entertained as to this niggardness being injurious, and that a much larger increase of grain would be the consequence of a more liberal application of such decomposing organic matter.

To the upland dry land crops, I would recommend the application of common salt, in small quantities. One variety grown in the southern parts of peninsular India, and noticed in the preceding list under its Malay name, *Cutandew*, will not thrive in a soil where salt is not present. Four or five bushels per acre is probably a proportion that will be found highly beneficial.

Sowing, &c.—Throughout India the three following modes of sowing rice are practised: 1. The seed is sown dry in the fields, where the plants are to grow to maturity. At Seringapatam it is called the *Barra butta*, or *Puneji*; in Malabar, *Podi-wetha*. 2. The seed is made to germinate before it is sown; this is known at Seringapatam as the *Mola butta*, in Malabar as *Chetu-wetha*. 3. The seed is sown thickly in a seed bed, and the plants when a foot high are transplanted into the fields, where they are to remain until harvest; at Seringapatam this is called *nati*, in Malabar *nearra*.

The cultivation differing in each of these modes, it will be most intelligible to consider them separately.

It must also be observed that there are two distinct crops of rice usually raised annually: one being sown just previously to the rains, and the other during the dry weather. In Mysore, the first is known as the *Hainu* crop, and the second as the *Caru* crop; by which names, for the sake of brevity, I shall distinguish them.

The *Caru* crops in Mysore, according to the time of sowing, are known by three names. If the seed is sown at the most favorable season, it is called *Cunba Caru*; but if, from want of power in laborers or cattle, some is sown too early and some too late, the first is called *Tula Caru*, and the second *Maysha Caru*. These variations cause a deficiency of from 30 to 50 per cent. in the crop. The produce of the *Hainu* and *Cunba Caru* crops is nearly the same.

Dry Seed Sowing.—For the *Hainu* crop this is regulated by the time of the setting in

* Trans. Agri-Hort. Soc. of India, vol. iii. p. 82.

† This variety yields a larger proportion of pure farina and starch than the varieties grown in the plains, and altogether appears to be a more nourishing article of food, and, therefore, deserving of consideration. It is reaped in the beginning of November.

of the rains. In Mysore, three days previously to the first sowing, about the middle of February, the soil is softened by being watered. It is then ploughed twice a month until the end of May. After the fourth ploughing, manure, obtained either from the cow-house or city, is put on. After the fifth ploughing, if rain does not fall, the field must be watered, and three days subsequently the seed is sown broad-cast, and covered by the sixth ploughing. Any rain falling during the thirty days immediately succeeding the sowing, is allowed to run off through an opening in the inclosing bank. If much rain falls at this time, the crop is considerably injured. If no rains have occurred during those thirty days, the field is kept constantly inundated until the crop is ripe; but if there have been occasional showers, the inundation is not commenced until the forty-fifth day.

Weeding, loosening the soil, thinning where too thick, and transplanting to where the crop is too thin, is performed thrice. First, between the forty-fifth and fiftieth day, and again in twenty and thirty-five days from the first weeding. Rice which ripens in five and a half months must be inundated on the twentieth day; and the weeding must be on the same day, and twice again at intervals of ten days.

The ploughing season for the *Cumba Caru*, when dry seed is used, commences about the 21st August, and the seed is sown about the middle of December.

In the *Maysha Caru*, when dry seed is sown, the ploughing begins in the last week of March, and the seed is sown after the first week of April. Dry seed is never used for the *Tula Caru*. In some places of Dinajpoor the seed is dibbled; a few seeds being dropped into holes, made about a span apart. This is the mode usually adopted for inserting the *Gohya*, or upland rice, by the Nepaulese.

Mr. Campbell states, "that there is probably one third of the valley lands annually under the cultivation of this variety of rice. It is sown during the latter half of April and the early part of May, and reaped during the last week of August and the whole of September. In the cultivation of *Gohya*, the greatest possible attention is paid to the preparation of the soil, by reducing it to a great degree of fineness, as well as by the exhibition of manure, and by previous exposure of the land to the fertilizing influences of water, air, and frost. Whether the *Gohya* succeeds a *velch* crop, a crop of *touli*, or another *Gohya* crop, the land to be sown with it in spring is delved, pulverized, and watered (if practicable) during the winter months of December and January. In addition to this, it has, when suitable to the soil, a coating of the black, earthy manure, laid on during the winter, and, when the cultivator can procure it, one of artificial manure immediately pre-

vious to the sowing. Early in April, the manure previously collected in small heaps on the field is spread over it, and about the middle of the month a light delving is given; which, followed by careful pulverization, serves to mix the manure with the soil, to keep the former close to the surface, and to render the field a dead level. Immediately the land is thus prepared, (not some days after, but simultaneously with the preparation,) the seed unmoistened is put in the ground by the fingers, and in rows six or eight inches apart, the sowers covering up the seed as they advance by drawing the hand over each transverse row of seed put in the ground. The *Gohya* sower squats on his or her hams, with a small basket of the seed placed on the ground between the knees, and, using the forefinger and thumb of both hands, deposits the seed, grain by grain, or two grains together, at regular distances in the ground, commencing laterally at the utmost reach of the hands, and moving backwards after each row of six seeds is completed, and the hands have been quickly drawn along the row for the purpose of covering them in. Nothing can be more advantageous for quick and equal vegetation than this process; the seed getting a bed in moist, freshly turned up, and finely powdered soil, not one grain of it being left uncovered, nor one grain deeper set in the soil than its neighbors.

The after culture of *Gohya* is as carefully and laboriously gone through as its sowing. So soon as it is well above ground, the soil is loosened at the roots of each row, by means of the small one hand hoe, and any weeds which may have sprung up with it are carefully removed. This hand-hoeing and weeding is usually repeated three or four times, and occasionally five or six times during the growth of the crop. So universal is this efficient and careful cultivation throughout the valley, and so essential is it considered for the procuring of a full crop, that the cultivator who leaves his *Gohya* unhoed and unweeded is looked upon as a ruined sluggard: often repeated weeding and hoeing is considered as indispensable to this crop as flooding to the *maisi* and *toulis*.

"The more you weed and hoe the *Gohya*," say the cultivators, "the heavier will be the returns of *Dhan*, and the greater the produce of chaul, or edible rice, from it." Not only the straw and ear are increased in size by it, but the more you hoe and weed, the thinner is the husk of the grain compared with its nutritious part. With the exception of the indigo cultivation in Tirhoot, and that of the poppy in Behar generally, I have never seen the culture of the *Gohya* rice in Nepal surpassed in efficiency, and I believe it is but rarely equalled in any part of India; yet the crop is inferior to the transplanted rice, which neither wants nor receives a tithe of this care,

and is rarely weeded in very wet seasons. The reaping, thrashing, and drying of the Gohya are performed as on the transplanted rice. Hukwa is made from it also, but in small quantities. It is of a whitish yellow color in the ear, the touri is of a brighter yellow, and the malai dark brown or blackish. The Gohya is considered very nutritious and wholesome.*

In Nepaul, from thirty seers to one maund are sown per biggah, and the average produce is fifty maunds.†

Fifteen cutcha seer of rice is the quantity of seed sown in the northern parts of Bengal upon a cutcha biggah (1.8 of an acre) of land.‡

GERMINATED SEED SOWING.—In Mysore, if this mode is adopted for the *Hainu* crop, the ploughings occur between the third weeks of June and the same period in July. The ploughing is repeated four times, each at right angles to the preceding, and the fields during the time inundated. The field is then manured, immediately ploughed a fifth time, and the mud smoothed with the laborer's feet. The water is drawn off, so as to leave its depth not more than an inch, and the sprouted seed sown. It requires no process to cover it. During the first twenty-four days the field is watered every alternate day, and then inundated until the crop is ripe. The weedings are on the twenty-fifth, thirty-fifth, and fiftieth days.

The seed is prepared by being kept under water in a vessel for three days; it is then mixed with an equal quantity of decayed cow-dung,§ and laid in a heap in the house, entirely sheltered from the wind and covered with straw and mats. At Joomla, in Nepaul, the covering used is a mixture of earth and manure. At the end of three days, sprouts three inches long are thrown out, and it is then fit for sowing.

This mode of cultivation is more troublesome than the former, and the produce is not greater, but it allows a crop of pulse to be previously obtained from the same ground, and requires only three fourths the quantity of seed.

Transplanted Rice is cultivated in two modes, viz., *Barraagy* or *dry plants*, and *Niragy* or *wet plants*.¶ Low lands are required for each. For the *Barraagy* in the *Hainu* crop, the ground is worked at the time and in the manner as for the dry seed crop. In the last week of May the manure is put on, the seed sown very thick, and covered with the plough; one tenth of a biggah of

seed is allowed in Puraniya for every biggah that is to be planted. No rain occurring before the eighth day, water is given, and again in a fortnight; but if there are showers, these are unnecessary. From the forty-fifth to the sixtieth day, the plants continue fit for removal, to facilitate which, the field is inundated for five days before. For their reception, the field, inundated all the time, is ploughed four times in eight weeks, commencing in the first week of June. Manure is added before the fourth ploughing; after this, the surface is levelled with the foot, the seedlings are planted, from three to five being placed together, and an interval of a span allowed between every two little tufts. The water is let off for a day, but the land is subsequently kept flooded. The weedings are performed on the twentieth, thirty-fifth, and forty-fifth days after the transplantation.

In Mysore, for the *Tula Caru*, sprouted seed is sown about the 19th of October, the ploughing having commenced a month before. The *Cumba Caru* sprouted seed is sown about the 1st of January; the ploughing having taken place in the previous month. The ploughing for the *Maysha Caru* sprouted seed commences in the second week of April, and the sowing in the same period of May.

When sprouted seed is sown in Mysore, one bushel and four and a half gallons are allotted to an acre, and an average produce is rather better than thirty-one bushels.

About Madura, the quantity of seed sown is larger, varying from three pecks to more than one bushel, and the advantage is shown by the increased produce. This was from forty-seven to fifty-nine bushels, being invariably the largest where most seed was sown.*

TRANSPLANTING.—When this mode of cultivation is adopted, the rice is sown very thick in a small space of manured ground; and when the plants have attained the height of six or eight inches, it is ready for transplantation.

A field overflooded has to be ploughed until the surface is converted into a sufficient mud, and to this the plants are removed from the seed-bed. One or two are dropped together in a place, and this is repeated at equal distances all over the field, which appears a mere sheet of water. To secure the plants sinking in their proper position to the bottom, each has its roots enveloped in a ball of clay. Such crops, says Dr. Tennant, though tedious in preparation, generally remunerate for the extra trouble.†

The progress of vegetation in Behar is so rapid, that the first harvest arrives in two months after planting the rice as above described; the second is reaped in November, and having been planted in August, may be grown on the same field as its predecessor. The

* Trans. Agri-Hort. Soc. vol. iv. pp. 122, 124.

† Ibid. vol. iv. p. 79.

‡ Tennant, Ind. Rec. vol. ii. p. 185.

§ About Mundium they also add fresh plants of *Plasium esculenta* (Roxb.) there called *Tumbay Sepu*.

¶ The transplanting system is called *Nedaga* in South Malabar.

* Buchanan's Mysore, i. 140.

† Ind. Rec. ii. 126.

second crop grown is a fine species of rice, and constitutes the most valuable crop; and upon its success the well-being of the farmer and of the country greatly depends.

In Mysore, for the transplanted *Hainu* crop the ground is ploughed dry thrice between the middle of February and the middle of March. About the 24th of May the field is inundated, and ploughed four times in the fifteen following days. After the last ploughing, the surface is levelled with the foot, the seed sown very thick, and dung sprinkled over it. The water is let off; but on the third, sixth, and ninth days water is again given, and as often let off, not being allowed to stagnate. On the twelfth day the water is let on, and allowed to remain until the plants are fit for removing, which is about thirty days after sowing. The cultivation of the field into which they are transplanted is the same as for the *Barraagy*.

By this mode, the field into which the seedlings are transplanted is enabled to produce previously a crop of pulse. Otherwise, the produce is not more than that obtained from seed sown where the plants are to remain. Nor is it stated by Dr. Buchanan that it is superior to the less troublesome mode of germinating the seed. It has the advantage of insuring a more regular plant, but its regulated distances are of less consequence, since hoeing is not required in a field constantly under water. Twenty times the seed sown is an average crop.

In Mysore the *Cumba Caru* transplanted rice is cultivated only as wet seedlings, *nir'agy*. About the 16th of November the ploughings commence, and the seed is sown by the last day of December. The fields on which this crop is ripened are begun to be ploughed about the 1st of December, and the transplanting commences about the 29th of January. The *Tula Caru* transplanted rice is sown *nir'agy* in the third week of October, and is transplanted within a month after. The *Maysha Caru* transplanted rice is also sown *nir'agy*, after the first week of May, and in about a month the seedlings are transplanted.

The regular *Caru* crop of the transplanted cultivation does not interfere with a preceding crop of pulse; but this is last when, from want of laborers, &c., the early or late seasons are adopted. The various modes of cultivating rice give the farmer the great advantage of being able to cultivate the same land with fewer hands and less cattle than if there were only one seed time and one harvest, the labor being divided over a great part of the year.*

In the vicinity of Pali-ghat, in South Malabar, the land appropriate for the production of rice is called *Dhanmurry*, and is of two kinds—the *Palealil*, or high ground, which yields only one crop annually, and the low ground, *Ubayum*, which produces two crops in the year.

The chief points of difference in their system of cultivation is, that on the *Palealil* ground they keep the crop without water for fifteen days after being sown; it is then hand-weeded by women, and the plants thinned to equal distances. At Pali-ghat, when rice is cultivated according to the transplanting system, the seedlings are raised in a poor, high-lying soil, called the *Maytan*, which is kept for the purpose, and pays no rent.

I shall make but little allusion to the agriculture of Birmah, because it is very inferior even to that of India; but, as an example, I will give an outline of that adopted for this their principal crop. After ploughing, which is not done more than twice, and even in some lands only harrowing is given, the clods are broken by means of a cylinder of wood, dragged over the surface, but not turning upon an axis. The land is wetted, and the plants transplanted, after which no cultivation is given. Two crops, and sometimes three, are obtained annually. The best is produced during the rains, the others by irrigation, which is a rude, expensive process, performed by hand.*

Transplanted spring rice is cultivated in Puraniya, on the banks of the marshes, which gradually dry as the spring advances, but which always retain water in the centre sufficient to supply the fields.

Between mid-September and mid-November, a plot is ploughed upon the edge for a seed-bed. In this, the soil being first mixed into a mud, the seed is sown, having been made to sprout by steeping it for thirty hours in water, and keeping it covered with grass in a sheltered place.

The seedlings, before the second week of January, are transplanted twice, lower down the marsh's side each time, as the water retires. At each transplanting they occupy double the space they previously required.

Between mid-January and mid-April they are finally transplanted. About one half is so removed in the first month of the season, and is very productive; an eighth is transplanted in the second month, and gives an indifferent crop; and the remaining three eighths are transplanted during the third month, making a return so miserable as to be scarcely worth attention, if it did not occupy time which would otherwise be passed in idleness.†

REAPING.—It is a common practice in Dinajpoor, when the rice is nearly ripe, to press the crop quite flat on the ground, by passing a bamboo, held by two men, over the whole. Various reasons, says Dr. Buchanan, are assigned for this. It is said, especially in the northwestern parts of the district, where the practice is most common, that in some measure it secures the field from the depredation of

* Buchanan's Mysore, i 84-90.

* Crawford's Embassy to Ava, &c.

† Martin's Buchanan's India, iii. 212.

thieves, who, according to the most moderate computation, compose three eighths of the men in these parts. It is also said that it prevents the grain shaking out when ripe, and so gives time for harvesting it, resting on the ground not being injurious; moreover, that it facilitates reaping, as the reaper sits on his heels while at work. It is chiefly the second and third kinds of winter rice that are managed in this manner. In reaping the coarser kinds, little but the ears are cut off; but of the finer, the straw is severed close to the ground.

DISEASES, &c.—Although the rice requires a more abundant supply of water than any other of the cereal crops, yet that it can be applied in excess, admits of no doubt. If, during its early growth, the water for several days is deep enough to overtop its central leaves, the crop is injured, and may be destroyed. Dr. Tytler states decisively, that in Bengal the rice annually grows in water far more plentiful than is required for its proper cultivation, and hence the greatest part of every crop of Bengal paddy, more particularly the autumnal, or *ashoo* (vulgarily pronounced *aoosha*) harvest, is affected with the *ergot*, or *cockspur*, a disease which renders it not only innutritious, but poisonous.*

The *ergot*, *clavus*, or *cockspur*, which occasionally so much injures the rice crop, is known in Europe as affecting barley, rye, and, more rarely, wheat. It has been shown by M. de Candolle to arise from a parasitic fungus, which he has named *Sclerotium clavus*.

It is an elongated substance, filling the place of the grain in the glume, or husk; its flesh firm, white, compact, of one substance; its surface dingy purple. Like all the parasitic fungi, its occurrence is promoted by such excessive humidity as is unfavorable to the plant. Some districts are much more liable to its attacks than others. It has not been found to be caused by applying water in excess upon the head of the grain. It is strictly topical; one or more grains in the same ear may be affected, and the others free.†

In Nepal, the upland rice is liable to suffer from the attacks of grubs. These attack the roots of the plants, and their ravages are rendered apparent by the languishing and whitening of the young rice plants, when only a few inches above the ground; this is attributed to the attacks of a large grub, called *kióngki*, or root-worm, of a black or blue color, generally the thickness of the forefinger, sometimes as thick as the thumb, and about two inches long. It is supposed by the natives to be produced, and to thrive best, in rotten manure, and to devour the seed and young radicles of the plant. The *kióngki* is most destructive to the Gohya, or upland rice, attacking it soon after being sown, and continu-

ing its ravages until about the middle of May, after which it ceases. The people do not know of what flying insect this grub is the larva, nor have they any remedy against its attacks, except removing it from the fields when they see it. The third disease of white crops is a premature whitening of the ears of rice, (both kinds,) and the failure of the grain in them. This is attributed by the Newars to the attacks of a small grub, the size of the common white maggot, the body of which is white, the head black and hard. It is called *sheo-ki*, the marrow or pith-worm. The *sheo-ki* is supposed to eat the roots of the rice plants; but its prey more especially is said to be the stalk and juices of the plant; for obtaining the latter of which, it cuts the plants at the joints, after which the ear whitens without filling. The natives attribute the drying up of the ear and plant to the drinking of its milk (sap) by the grub, which prevents the due formation of a full-sized grain.*

PANICUM ITALICUM.—There are two varieties cultivated in Mysore, the *ghids*, or dwarf, and the *jotu*, or *doda*, or tall.

Soil.—In whatever country grown, it requires the best light, dry soils, unless manure can be afforded for its culture; in which case a poorer soil will suffice.

Cultivation.—The ground is ploughed six times in spring; and the seed, about half a bushel per acre, ploughed in at the commencement of the rains.

It is sometimes grown in drills among *Cynodorus corocanus*.

No after culture is given. The crop, ripe within three months from the time of sowing, is reaped close to the ground—in Mysore stacked for eight days; and after being dried in the sunshine for one day, the grain is trodden out. The usual produce is sixteen bushels per acre.

Use.—It is used for the same purposes as rice. The straw is not good fodder.

PANICUM MILLARE.—There are three varieties in Mysore, called *hari*, *cari*, and *hal*, or *bily*. They are never intermixed.

Soil.—It requires a light soil. Of this description the very poorest is usually assigned for its growth, for no other reason than that manure is so deficient.

Cultivation.—The land is ploughed in the spring five times; and when the heavy rains begin, the seed is sown from two to three and a half gallons per acre, and ploughed in. Manure is not absolutely required for this crop, even in the worst lands, though its application improves the produce.

No after culture is given to it; and in three months it is reaped, being cut close to the ground, and gathered into heaps. In five or six days it is ready for the thrashing floor and its oxen. An average crop is in some

* Trans. Agri-Hort. Soc. of India, i. 10.

† Quart. Jour. of Science, ii. 273.

districts three, and in others sixteen bushels per acre; but always most abundant where the crop is sown thickest.

Use.—The grain is employed for the same purposes as rice, and the straw is a serviceable fodder.

PANICUM MILLACEUM.—This is the well-known *chenna* of Bengal. Two varieties are known in Puraniyah—*bhadai*, which ripens in spring, and *vasaki*, ripening in the rainy season.

Sowing.—The first is sown about February, and the second just as the rains commence.

In Mysore only one crop of this grain is sown, and the sowing takes place at the close of the heavy rains.

Soil.—This differs from the other species in preferring a tenacious soil, which should be moderately fertile.

Cultivation.—After two or three ploughings, the seed is sown, and, in Mysore, covered by an additional ploughing; but in other parts of India the usual harrowing is given. No manure is applied, nor any other culture. The crop ripens in about ten weeks, is reaped close to the surface, and the grain is trodden out. In Mysore it is stacked for a few days before thrashing.

Use.—The seed is used as rice, but the straw only serves for fuel.

RAILROADS.—ADDRESS TO THE PEOPLE OF THE SOUTHERN AND WESTERN STATES.—By way of preface to this paper, we will furnish a short historical memoir of the railroad movements in New-Orleans, which have been attracting so much public attention.

In 1834, M. W. Hoffman and the Hon. Clark Woodruff originated the idea of a railroad from New-Orleans to Nashville, Tennessee. A charter was obtained in 1835. Surveys were immediately undertaken. Difficulties interposed by the Legislature of Mississippi arrested the work one year. Twenty miles were however finished and put in operation. Here the enterprise failed, with the loss of an immense sum of money, and at this day nearly all traces of the superstructure are lost. For this failure several reasons are assigned: the work being in advance of the times—the want of confidence on the part of the people and legislature—the high prices for material—the restrictions imposed by the city—the crisis of 1837, &c.

In the summer of 1849, C. S. Tarpley, of Mississippi, began the publication of a series of papers advocating a road from Jackson in that state to New-Orleans. A meeting was soon after held at Jackson when it was resolved to hold a convention of the two states at Monticello. This convention met in December, and after appointing the following committees, adjourned over to meet in New-Orleans on the 21st March, 1850:

Committee on Routes.—John Marshall, Hon.

E. Ford, W. H. Bowen, A. Steele, — Love, S. M. Catchings, W. A. Grice, John M. Bell, N. S. Edwards.

Committee on Statistics.—W. F. Robinson, J. T. Lampkin, C. S. Tarpley, G. Nicholson, E. Safford, of Mississippi, J. D. B. De Bow, New-Orleans.

Committee on Memorials.—S. J. Peters, James Robb, J. W. Stanton, A. Hennon, J. Leeds, James Saul, of New-Orleans; Messrs. Penn, Tarpley, Stone, Catchings, Mathews, Guion, Wauil, &c., Mississippi.

The meeting in New-Orleans was held in March, 1850, but attracted no public interest, and consisted only of a handful of persons. At this the Mississippians took great umbrage, and the friends of the work began to despond. Another meeting was however suggested by them, to be held in New-Orleans, in April, 1851. In the interim the little heaven had been leavening the whole mass. Prominent gentlemen of New-Orleans were willing to come forward and show their hands. Robb, Burke, Benjamin, Conrey, White, &c., were shoulder to shoulder. Mr. Robb's speech electrified the convention and the community. Morning began to dawn. Meanwhile some gentlemen of Opelousas came to New-Orleans, entreating for capital, and proposing a bonus of \$100,000 to any company who would build them a road to Point Coupée, on the river, about 35 miles. These were Messrs. Swayze and Martin, but they got little encouragement. The Attakapas country was also vigorously urging a railroad to the Mississippi at Plaquemines or Donaldsonville. The idea however took hold upon some minds, and at a meeting of which Maunsel White was president, it was determined to build the road quite down to New-Orleans instead of to Point Coupée. A convention was called for June, which was held in the Municipal Hall, and largely attended from the city and parishes. Mr. Burke offered a series of resolutions, in substance the same as those which were offered by ourselves in the April convention, and coldly laid upon the table without dissent, (the word southern being thought to smack too strongly of Carolinism and Nashville Conventionism,) providing for a call of a *General Railroad Convention* of the Southern and Western States, to concert common measures of advancement. The resolutions were carried by acclamation, and a committee appointed, consisting of Glendy, Burke, A. D. Croseman, J. D. B. De Bow, Alexander Mouton, and C. S. Tarpley, to prepare an address to the people of the south and west, and to visit all of the states, delivering oral addresses, &c. How the committee performed their duties will be perceived by the paper now presented, and in the large and enthusiastic convention which met in New-Orleans in January, 1852, and which matured the present great system of southwestern improvement. The reader will

obtain the full details of all of these movements in the consecutive volumes of the Review.

ADDRESS.

The portion of the Union which we occupy is one of the most wealthy in the world, and produces, in proportion to population, the greatest amount of exportable commodities. Shall it be asserted, that this great section of the Union is so peculiarly *agricultural* that it can contain within its limits no large cities, no controlling centres and emporia, but must be dependent upon the northern Atlantic seaboard, penetrated through mountain passes, and by the most difficult and devious roads, for the vitals of commercial life and activity? Is there any necessary reason that the whole commercial strength of the nation should concentrate in the cities of the north, whilst New-Orleans, Mobile, Charleston, and Savannah, are arrested in their progress, or exhibit at times even the evidences of decline? Whence is it, that Louisville, Memphis, Vicksburg, and Nashville, have shown less of that progress which has marked other sections of the confederacy? Are the cities and towns of the south and southwest in particular to decline, or to remain stagnant, whilst the din of progress is heard every where else? Are there not sympathies and interests to bind us together in this section of the south and the valley of the west, and can we not, by a concerted action, promote our common weal? Whilst we have been idle spectators, New-York and Boston have been taking away the commerce of the rich and growing states of the northwest, which once paid tribute to us as it passed to the ocean, but which now avoids our limits and refuses its former wealth. Are the millions of the northwest more naturally allied to those of the north than to us, who occupy a part of the same great valley, and are nearer of approach; and must we for ever abandon the idea of controlling, or of sharing their commerce?

These questions, fellow-citizens, have a direct and common interest to all of our states, and upon their solution will depend much of the history of this great and growing region in the future. Dense population, great and growing cities, wealth, power, and influence, and political strength on the one hand—or scattering villages, decayed cities, stagnant life, and comparative poverty and imbecility, are the alternatives which seem to be presented; the realization of which may depend, in a much higher degree than we have supposed, upon our own individual agencies.

It is time that we were truly aroused to the urgencies and necessities of the occasion, whilst all the world around us is in motion. The interiors of many of our great states are as difficult practically of communication with their commercial cities, or with each other, as

they would be were the restraints of separate governments and custom-house collectors interposed between them! Roads for many months of the year almost impassable, and at all times of enormously costly and laborious transit;—rivers with their insecurities and detentions, and frequent and frightful losses, exclude us from intercourse and easy connection with each other, except upon the borders of the very largest rivers. For many months of the year the citizens of Louisville might reach New-Orleans by way of New-York sooner than by that of the Ohio and the Mississippi! Nashville is at all times as distant and of more hazardous approach to New-Orleans than is New-York. Little Rock is practically as far from the ocean as if seated at the Falls of St. Anthony. But this is not the worst. Whole regions of immense fertility within our limits are shut out entirely and hopelessly from any market whatever, and in not one of our states can the citizens of the interior reach their shipping or commercial points in less time than it would take a citizen of Boston to visit New-York, Philadelphia, Baltimore and Washington, and even in many cases to stop at each of the points—and return to his home! Thus is it, that our prosperity is interrupted by causes which tend to separate us in interests and in feelings; and thus is it that we seem incapable of alliance for any great purpose, whilst other sections of the Union constitute, so far as their interests are concerned, always a unit.

If we compare the ten northern states, Maine, New-Hampshire, Vermont, Connecticut, Rhode Island, Delaware, New-Jersey, Massachusetts, Pennsylvania, New-York, with the ten southern, Maryland, Virginia, North and South Carolina, Georgia, Alabama, Florida, Louisiana, Arkansas, Tennessee, we find, the population of each class of states being nearly equal, the north has 6,888 miles of railroad in operation, whilst the south has but 2,809. Thus, in the comparison of population, the north has three miles of railroad to our one. The comparison would be still more striking, were the states of the southwest compared with those of New-England. If we compare in regard to territory, the area of the northern states is less than one fourth that of the southern, or one sixth, including Texas. Thus the north has twelve times, or, including Texas, eighteen times the extent of railroads to the square mile that we have.

The average cost of railroads at the north has been at least double that of the south;* therefore, each individual of the north has

* January 1st, 1849, there were in Massachusetts, and the adjacent states, 1,259 miles of railroad, costing \$47,322,938—equal to \$37,587.72 per mile. The average cost of 247 miles of road, in North Carolina, was \$12,806 per mile; of 51 miles in Alabama, it was \$10,763; of the Central Road of Georgia, 190 miles long, it was \$12,793 per mile, and the Macon and Western Railroad, 101 miles, cost only \$8,218

expended on the average between six and eight times as much as each individual at the south, and each mile of northern territory has expended upon railroads on the average about thirty times as much as each mile of southern territory!

Whilst this state of things has existed, the relative commerce of the two sections has remained as follows: In 1846, the exports of northern growth and manufactures, (and much of these manufactures were from southern materials,) were \$27,331,290; whilst the exports of southern produce, cotton, tobacco, rice, naval stores, &c., were \$74,000,000, or three times as much. In 1847, the southern exports were \$102,000,000, against the northern \$48,000,000; in 1848, \$98,000,000, against the northern \$84,000,000; in 1849, \$99,000,000, against \$32,000,000. These facts are conclusive in evidence, that the railroad inferiority of the southern states is not the result of inferiority in commercial and transportable commodities and wealth.

A comparison of particular states will show, too, most conclusively, that not the mere denseness of population has influenced railroad construction. Thus Ohio is denser than the average of New-England, and has but one third to one half the extent of railroads. Indiana, and parts of Michigan, are as dense as Vermont. Kentucky and Tennessee both exceed the density of Maine, which has nearly 211 miles actually constructed, whilst Kentucky and Tennessee together have not so much; or, to compare even the southern Atlantic states with each other, Georgia, with one million of population, has twice or three times the extent of railroads contained in all the states of the southwest, and south Carolina has more than Louisiana, Texas, Mississippi, Alabama and Arkansas, actually constructed, though *her* population is not one third so great as theirs!

(Will it be said that the people of New-England and the north are more migratory in their habits, more extensively addicted to travel, than the people of the south and the west? This may be true, but for no necessary reason, as the statistics of the Georgia and Carolina roads already evince; and, indeed, the experience of the north itself confirms our judgment. Time was when locomotion was as tardy and as interrupted at the north as it is here, and the disposition for travel did not then exist.

When the Boston and Lowell road was proposed, the commissioners, basing their estimates upon the extent of travel then existing, supposed that 87,500 passengers might be carried annually. This high figure was thought by many absurd. Ten years afterwards this road carried 400,886 passengers

in the same time. The Boston and Worcester road was estimated at 23,500 passengers; in 1846 it reached 470,819. The Eastern road claimed 121,000; it has reached nearly 1,000,000! The Fitchburg road, based upon the results up to 1845, had calculated upon 72,000 passengers per annum. The number immediately reached 327,084. Thus the travelling propensities of Massachusetts did not create their roads, but the roads created these propensities.*

Where, then, are the obstacles to southern and western railroad improvement, if they do not exist in the want of merchantable products for a market—in the density and extent of population—in travelling propensities, or other sufficient facilities of transport? Can such obstacles exist at all among a people who have within themselves, for a large part of the year, abundance of negro labor applicable to the construction of roads at cheap expense, abundance of timber to be had without cost, abundance of public lands ready to be donated, and which will, in some instances, contribute half the expense of construction—a level country requiring little grading, and no right of way to be purchased, an immense consideration in other quarters? There is not a people upon the face of the earth who can, at so cheap an expense, checker every section of their fertile territory with the iron bands of travel and of commerce, or bear in every part of their limits the shrill pipe of the locomotive.

The importance of speedy, cheap, and uninterrupted communication between the people of the same, or of neighboring states, is felt in the cheapening of commodities, and, of course, in the increase of their consumption and production; in the enlargement of the area tributary to their great towns, and in the extension of the benefits of these towns; in the diversification of labor and employment; the promotion of commerce; the re-

* *Safety of Railroads.*—The chief cause of the popularity of railroads as instruments of travel, is their safety. No other conveyance can compare with them, not even private carriages. There were in operation, January 1st, 1849, in Massachusetts, and the adjoining states, 1,250 miles of railroad; and in 1848, (as far as reported,) there were transported on these roads 19,473,303 passengers within six years; there were 92 passengers killed—53 employees, and 42 other persons—in all, 117. In England it is estimated that the chances of a man's losing his life in travelling 300 miles is as 217,870 to 1; and that out of 400,000 packages of merchandise only 1 is lost. By a return made to the English legislature, we find a statement made of accidents which had occurred in England, Ireland and Scotland, for half a year. Ninety persons had been killed; of these, thirteen died from causes which the parties deceased could not have averted. Fifty-seven had died from misadventure or carelessness on the part of the deceased themselves. Ninety-nine had also been wounded; and the whole number of passengers had been, during the half year, no fewer than 20,330,492 persons. These facts illustrate very fully the safety of this mode of travel.

per mile. The Jefferson Railroad, Indiana, cost \$3,064 42 per mile—66 miles.

removal of prejudices; the strengthening of bonds of harmony and peace,—the realization of greater security and strength during actual war! In a republican government more than in any other in the world, these arguments should be held irresistible and conclusive in favor of such speedy, cheap, and uninterrupted communication.

It is curious to reflect upon the tardy progress which the world has made in the means of transport and conveyance, until within the experience of the present generation of men. Only eighty years ago, in proud old England, the traveller, Arthur Young, bewailed the "perils" of her best turnpikes. "Let me most seriously caution all travellers who may accidentally propose to travel this terrible country, to avoid it as they would the devil, for, a thousand to one, they break their necks or their limbs by overthrows or breakings down." "This is a paved road infamously bad; any person would imagine the people of the country had made it with a view to immediate destruction, for the breadth is only sufficient for one carriage; consequently it is cut at once into ruts," &c. "Let me persuade all travellers to avoid this terrible country, which must either dislocate their bones with broken pavements, or bury them in sandy mud." This was spoken in 1770, of one of the wealthiest portions of England, which is at present, according to Dr. Lardner, reticulated with railroads, upon which tens of thousands of passengers are daily transported at a speed varying from thirty to fifty miles an hour!

What is true of England is true, even in a higher degree, for the United States, since many of us can remember the time when whole days, and even weeks, were occupied in passing between the most populous and frequented cities of the north, which now employ as many hours; and when New-Orleans was practically as remote from the city of Washington as is the Bay of San Francisco or the mouth of the Columbia.* Notwithstanding the extraordinary improvements which have been made, many populous and wealthy portions of the south and west

are in no better condition than were the parishes of England in the time of Arthur Young. "Sir," said a farmer to us in Newberry, S. C., "talk of the expense of waggoning to market my cotton eating up the profits of my crop. It does more, sir. I could take you to the Buzzard Lane and show you, besides the profits of my crop, some dozen mules and horses eaten up by the mud holes. I could take you to the grave-yard hard by, and show you where lie buried my dear friends, who have died of exposure while waggoning over these cursed holes," &c.

Railroads are the creations of the present age, and have reached their maturity almost at one bound, if we can call that maturity, which is always progressing and achieving results (that excel the dreams of ancient or oriental fabulists) higher and higher, and more rapidly than they can be chronicled.

The Manchester Railroad, in England, has the credit of having been the first in the world; and Mr. Stephenson, its projector, was laughed at very generally for his folly in supposing that twelve miles an hour might be attained on this road. This was in 1832.* In 1840, there were 1,800 miles of railroads in Great Britain; in 1841, 1,500; 1845, 2,400.

The first railroad in the United States—a pretty affair of four miles—was employed to carry granite at Quincy, and was built in 1825, though in January, 1829, says the *Railroad Journal*, there was not a road in operation on which locomotive engines were successfully used as the propelling power! In 1832, there were 92 miles in operation, and the utmost that was claimed for them was, that they would answer for light parcels and passengers. In the twenty years that followed, there have been constructed 7,000 miles of railroads in the United States.

Up to 1845, there had been expended in the United States 110 millions of dollars upon railroads, which were yielding at that time an average interest of five per cent.; whilst in the same period 150 millions had been squandered on banks, which had carried ruin before them.

Let us briefly consider some of the effects of railroads as they manifest themselves upon population, industry, wealth, and society.

1 *Upon Population.*—It will not be denied that very much of the settlement of a country depends upon the capacities afforded of communication and transport. Even inferior lands will be cultivated, if within reach of a market, whilst the most productive will remain in a state of nature, or with the most limited population. The arguments which

* Mr. Balfour, of Massachusetts, says: "The first railroad charter in the United States was granted March 4th, 1826, to convey granite from Quincy, Mass., to tide-water. The first railroad in the United States, on which passengers were conveyed, was the Baltimore and Ohio road, chartered February, 1827, and partly opened December 28th, 1829. A single horse was employed, carrying 41 passengers at the rate of 12 miles per hour. Benjamin Franklin, in 1743, advertises that the northern post will set out from Philadelphia for New-York on Thursdays—the southern post on Mondays—going every fortnight during the summer season! There are now three daily lines between Philadelphia and New-York. The news of the battle of Bunker Hill was two weeks in reaching Philadelphia. William Ellery, a delegate to Congress, 1777, was 25 days journeying on horseback from Dighton, Mass., to York, Penna.; and Josiah Quincy, in 1773, was 33 days in a journey from South Carolina to Philadelphia," &c.

* They laughed more heartily at Mr. Clinton. "Where is the water to come from to fill up this great ditch?" "You need have no fears upon that subject—the tears of the people will fill it."—*Debate on the construction of the Erie Canal.*

apply to common roads are strengthened in the case of turnpikes; still more on plank-roads and canals, and in the highest degree on railroads, which introduce the potent element of steam. It is common experience that settlements and large towns will spring up on the route of a railroad, where hitherto nothing but farm-houses were to be seen, except at its *termini*. The traveller at the north will be struck with this every hour. These villages and towns become themselves the centres of a back population, and give rise to the opening of new lands, and thus the area continually widens. The history of the west is strongly in point. When she was shut off from the Atlantic by a road of 60 days, or a flat-boat navigation quite as long, the progress of population and products was slow, revolutions were openly discussed, and a separate government adequate to her necessities proposed. The power of railroads and steam has changed the whole aspect of things, and the west, which had but 300,000 at the close of the last century, contained, in 1820, 2,207,463; in 1830, 3,672,569; in 1840, 5,302,918, and reaches nearly 10,000,000 at the present time. How much larger might have been the population, had facilities like those of New-York and Massachusetts been enjoyed, may be readily imagined. It will not do to argue that population must come before railroads. It is possible to stimulate and excite it! If the *natural* facilities of rivers and navigable streams exercise great influence on the growth of population, as in the history of a settlement none can deny, will not other facilities of a like or even a different character have the same effect? Population follows the rivers, and not rivers the population, and so is it of railroads.

2. *Upon Industry.*—A people dependent upon mere production, and incapable of exchanging, can only remain in savage barbarism. The first step in progress is barter; for without it, production will be confined to the mere abject necessities of life. Trade stimulates new energies and life, and ultimately civilization. Industry is its hand-maiden. Manufactures go hand in hand with it; for every article of manufacture, except the very rudest, presupposes exchange, since the skill of the field laborer must be supplied by that of the artisan. The frequency of exchanges, and the capacities for them, thus operate upon production and fabrication. The Indian hunter will transport on his back, or in canoes, his peltry, hundreds of miles, to the trader. This is exchange under the greatest conceivable disadvantages. The Mexican trader will supply the interior commerce upon pack-horses across great deserts. This is commerce at one remove; but still, under such discouragements, it cannot thrive, and thus Mexico remains, from age to age, without improvement or progress. The wagon, the flat-boat, the ship, the

steamer, and the railroad, are successive steps in advancement. New wants spring up with the facilities of their enjoyment, and new energies are diffused. The poorer classes become consumers of what formerly was confined to the wealthy. The wealthy look around for new marks to distinguish them from the commonalty; thus industry is every where taxed and encouraged, manufacturing towns spring up, and villages grow into immense cities. The forests give way to the axe, and the age of highest civilization is ushered in.

3. *Upon Wealth.*—We shall confine ourselves here to a few facts, which go to show the immense results which have grown out of the construction of railroads. They are the creators of wealth in more than one way. As a source of profitable investment, railroads have not been surpassed by any other. We have stated, the actual earnings on the roads of England are over four per cent. on the present value of shares, whilst the interest on money is much less. If there has been a depreciation in the stocks of the roads, it is easily accounted for by the monomania which induced the construction of roads that were unnecessary, and by the reckless and extravagant system of construction, incident to the infancy of all novel enterprises. The same remark applies to the United States, where the dividends of roads average over five per cent., though in Massachusetts this average reaches eight per cent.; whilst upon many roads in the country, ten, and even a much greater per cent. has been realised by an economical management. No other investments of capital have paid more; and if we take a long series of years, no others have paid so much. Losses, to be sure, have been incurred, and immense amounts sunk, as our own state of Louisiana may exemplify; but in what department of business has experience been otherwise? Certainly not in commerce; certainly not in banking; nor even in agriculture and manufactures. Visionary and impracticable schemes, and ruinous extravagance, will find their place in every branch of human affairs. In the United States they have been, perhaps, less felt in the matter of railroads than in any other matter. Nor is it in actual dividends alone that railroad profits are achieved. Far from it. These are among their least advantages. Proprietors, urban and rural, feel their effects primarily and to the largest extent. If the whole amount of the investment were for ever *without* dividend, it would be good economy often for the landholders if they contributed every cent of it. The enhancement of the value of property has in many cases paid tenfold the value of the investment. Throughout the Union property has received an actual tangible benefit to a much greater amount than the cost of all the roads in it. New-York is a strong illustration. In the fifteen years which imme-

dimly succeeded the construction of the Erie Canal, the value of property in the city advanced 149 per cent., though in the preceding ten years it had not advanced one dollar; the per cent. increase of population being not much greater immediately after than before the construction of the canal. "Wherever railroads have been constructed," says Colonel Gadsden, of South Carolina, "property has risen in value, and new stimuli have been given to trade and intercourse. These are not speculative views, but realities. The appreciation of property in Boston from the roads converging upon that city has been estimated at thirty-seven millions of dollars. A reference to the statistics of Carolina roads will show that property and trade has, within the last fifteen years, and since the completion of our railroads, increased in a greater degree on the Neck, in Colleton, Barnwell, Orangeburg, and Edgewood, than in any other portion of the state," &c.

He says again: "I shall show that trade has expanded, and the value of real estate increased, since the establishment of the railroad. Any one who will make the inquiry, will find that land all along the road to Hamburg and Columbia, for five miles each side of it, has appreciated in value since its construction, 50, 500, and in some cases, 5,000 per cent.; and where before its construction there were not twenty thousand dollars of trade, there is now upwards of \$250,000. The valuation of property on the South Carolina railroad, compared before and since its construction, shows—1830, \$11,387,012; 1846, \$19,075,157; gain, \$7,688,145. The city of Charleston shows real estate, 1830, \$8,366,914; 1840, \$13,527,743; gain, \$5,160,829. This increase in trade, and the value of real estate, I insist has been principally attributable to the introduction of railroads; and if the saving were added to the gain, the advantages would appear almost inappreciable."

The statistics of New-York and Boston are even more interesting in showing the results of railroads.

BOSTON.

Real Estate.	Personal.	Total.
1841..\$2,063,000	36,043,600	38,106,600
1842..65,509,500	41,322,800	106,733,300
1843..72,048,000	46,402,300	118,450,300
1844..97,764,500	64,595,900	162,360,400
1850.....	266,646,844	
Increase of real and personal		
estate from 1841 to 1845.....		
Deduct cost of railroads in		
Mass., to that time.....		
30,244,926		
Net gain, supposing the roads dead stock, \$44,008,874		

The same period of five years in New-York showed a falling off in the value of real estate from \$251,194,920 to \$247,152,308, an amount equal to \$4,042,617. This striking fact has alarmed the New-Yorkers,

and set them to work in such a way as must restore the equilibrium. Within the last five years both cities have continued their amazing strides.

We turn now to our neighbor and enterprising city of Mobile for illustration. The assessment rolls of real and personal estate, published by authority, show that the total value of property, which from 1836 to 1847 had averaged \$20,000,000, had declined in 1847, '48 and '49 to \$12,000,000. The result was on all sides evidences of general decay. Rents fell, business declined, and emigration commenced its inroads. The glory of Mobile had departed! But these things were not to last. The stake was too large a one. Property-holders awoke from their sleep of death. They looked around. The grand conception of a railroad to the Ohio was formed. Many laughed and sneered. Thousands doubted. But the work gained steadily in favor, until now, its realization is demonstrably certain. In a single year the real estate of Mobile has advanced \$5,000,000; rents have taken a new start; lots are sold at an immense premium over previous rates, and general confidence has been re-established throughout the city. The St. Louis Reveille says:

"The remarkable increase in the price of property in St. Louis this spring, as shown by the late sales of real estate in that city and the suburbs, is referable, in no small degree, to the anticipated construction of railroads having their termini at St. Louis. Since the passage, by the Illinois legislature, of the charter for the Ohio and Mississippi railroad, foreign capital and enterprise have been directed to that point, and large amounts have been invested in the last two months in real estate, at prices far in advance of those hitherto commanded by property at the same season, under circumstances of an ordinary character."

The next illustration is Virginia; and here we quote from the late able message of Gov. Floyd. "The wisdom of the policy stands fully vindicated by the recent assessment of lands in the commonwealth, which shows an increase of 29½ per cent. upon our entire landed property during the last twelve years, or an aggregate increase in the value of real estate alone, since 1838, of \$62,749,718, while the increase between the assessments of 1819 and 1838 was only \$5,036,580, or two and a half per cent. The total value of lands in the state, in 1819, was \$206,893,978; in 1838, it was \$211,930,508, and in 1850 it is \$274,680,226; which shows an average increase each year, since 1838, whilst the system of internal improvement has been in operation, equal to the whole increase during the nineteen years prior to that time. This result has been owing chiefly to the impulse im-

parted to the industry of the state by the facilities which her public works have afforded to our citizens, for transporting their produce to market. Portions of our country which, twenty years ago, were scarcely inhabited, are now thickly settled, well cultivated and prosperous. A tax-paying fund has been thus provided, which will constitute, through all time, a valuable addition to the permanent capital of the commonwealth."

Governor Floyd also presents, in a strong light, the comparative growth of Boston. "The advancement of Boston is beyond all example. The value of her property has increased from 120,114,574, to 266,646,844 dollars; over twelve per cent. per annum, or more than double the legal interest in Virginia. The population of the city has increased with an equally surprising rapidity. The population of the state has advanced from 718,592 to 973,715, an increase of 255,123. Every vocation of life has partaken of this prosperity and thrift. Agriculture, manufactures, commerce—all branches of industry, are advancing with an unparalleled rapidity; and the future prospects of Boston continue still to be as brilliant as those of any other city in the Union. That this great increase has been the result of her railway improvements, is denied by none—no other element of prosperity than this has been added to those always possessed by her; and we have therefore a right to infer that from this source flows the extraordinary tide of wealth. In 1839, Boston had 167 miles of railroad radiating thence in various directions; in 1860, she is connected with 3,000 miles—one third of which lies within the territory of Massachusetts; 1,350 within the borders of other New-England states; and six hundred and fifty in the state of New-York. These great works have enlarged the area of country which contributes to her commerce, probably tenfold, and the effect is unprecedented. Her annual manufactures are worth \$91,000,000; and the home trade of Boston is estimated to be worth annually the immense sum of \$200,000,000."

Baltimore, too, exhibits the effects already of a wise and liberal railroad policy. The Baltimore and Ohio road, though incomplete, has paid a dividend during the past year of more than ten per cent.; and such has been the effect produced by it already upon the commercial prosperity of Baltimore, that it is said "she is now compensated for her subscription of \$3,500,000 to the work."

The increase in the value of real estate in the counties bordering on the Vicksburg and Jackson railroad has been estimated to be from \$700,000 to \$7,000,000, whilst on the Nashville and Chattanooga road, in

four counties, the gain in the value of taxable property has been \$2,554,639.

"I confess," said Mr. Segur, in an able speech delivered several years ago to the Legislature of Virginia, "that if a canal or railroad were to depend, for the reimbursement of its cost, upon the production usually made at the time of construction, indemnity would be out of the question. But *present* production forms a very inconsiderable portion of the elements of transportation and profit. We must estimate the increased production caused by the improvements themselves, gradually progressing from the ordinary amount to the highest point to which the means of the state will admit augmentation—and that is almost incalculable. We must take into the estimate the opening of new channels of trade, and the filling up of old ones—the creation of manufactures—the opening of mines—the expansion of trade in all its ramifications—the rising up of cities—the growth of population—the increase of travelling resulting from increase of facilities of communication."

There can be nothing more striking in the history of railroads, than the manner in which they have triumphed over the strongest and most inveterate opposition, and baffled in their results the wildest calculations of their most sanguine advocates. The London Quarterly Review made infinite sport of the proposition that an eventual speed of 18 or 20 miles an hour might be attained. "The gross exaggerations of the power of the locomotive engine may delude for a time, but must end in the mortification of those concerned. We should as soon expect the people of Woolwich to suffer themselves to be fired upon by one of Congreve's ricochet rockets, as trust themselves to the mercy of such a machine, going at such a rate." In the present year, upon the Great Western road in England, 48.2 miles per hour has been attained on an average run, without stoppage, and we learn, also, in some cases the ultimatum has been sixty miles! A member of Parliament declared, in opposition to the Manchester road, "that a railroad could not enter into competition with a canal. Even with the best locomotive engine, the average rate would be 3½ miles per hour, which was slower than the canal conveyance."* The Buffalo and Albany railroad even now runs side by side with the great canal of New-York, a distance of 350 miles, transporting its passengers at 1.72 of a cent per mile, whilst the

* Mr. Wood, in his History of Railroads, says, "Nothing can do more harm to the adoption of railroads than the promulgation of such nonsense as that we shall see locomotive engines travelling at the rate of 12, 16, 18 and 20 miles per hour."

Pennsylvania road has transported coal at 1 cent per ton per mile, and the average of freight on the roads of New-England is about two cents per ton per mile on the heaviest goods. The Providence road has transported passengers at 1 cent per mile,

and the average freights on British roads, with their enormous expenditures, is 2d. per ton on bale goods.

Let us now furnish some tables showing the increase of business upon different roads.

Names of Roads.	Estimated No. Passengers before opened.	No. Passengers soon after opened.	No. Passengers carried in 1848.
Boston and Worcester.....	23,500	262,830	807,143
Boston and Lowell.....	37,400	400,886	525,764
Fitchburg.....	71,790	327,044	745,825
Eastern.....	121,700	488,026	1,021,169
Boston and Maine.....	—	460,426	1,067,569

TABLE SHOWING THE INCREASE OF PASSENGERS ON VARIOUS ROADS.

Names of Roads.	Year.	Number of Passengers.	Year.	Number of Passengers.	No. of Years.	Increase.	Per cent.
Boston and Lowell.....	1846	400,886	1848	525,764	2	124,918	31
Fitchburg.....	1845	196,669	—	745,825	3	549,156	280
Western.....	1842	190,436	—	405,614	6	215,178	113
Boston and Worcester.....	1843	262,830	—	807,144	5	544,313	207
Old Colony.....	1846	218,144	—	552,208	2	339,059	159
Eastern.....	1842	431,000	—	1,021,169	6	590,160	119
Boston and Maine.....	1846	460,426	—	1,067,569	3	597,143	129
Boston and Providence.....	—	476,525	—	569,127	2	92,612	119
Utica and Schenectady.....	1843	147,868	—	270,413	5	122,545	83
Utica and Syracuse.....	—	114,843	—	216,807	5	101,964	89
Auburn and Syracuse.....	—	83,316	—	154,215	5	71,899	86
Auburn and Rochester.....	—	105,190	—	209,259	5	104,069	99
Tonawanda.....	—	67,604	—	148,443	5	80,839	120
Attica and Buffalo.....	—	68,896	—	146,235	5	77,339	112
Baltimore and Ohio.....	—	149,533	—	270,616	5	121,083	80

The subsequent progress of these roads has been in a similar ratio. In freights the Western Road, Massachusetts, had a revenue of \$246,351—in 1848, \$781,030; the Boston and Worcester, 1840, \$96,950—1848, \$123,111; Boston and Providence, 1840, \$67,950—1848,

\$123,111; Eastern Road, 1840, \$41,837—1848, \$101,088; Boston and Lowell, 1840, \$104,569—1848, \$260,129.

The southern roads exhibit results equally gratifying, as the following will show :

BUSINESS OF SOUTH CAROLINA RAILROADS.

	Miles Run.	Passengers.	Up Freight.	Down.	Total Receipts.	Bales Cotton.	Barrels Flour.	Bushels Corn.	Bushels Wheat.	Bbls. Turpentine.
1834.	154,000	26,649	\$55,009	\$28,205	\$166,559	24,567	—	—	—	—
1835.	160,072	34,283	89,237	42,546	249,754	34,760	—	—	—	—
1836.	161,160	39,216	101,335	38,699	271,614	28,497	—	—	—	—
1837.	153,000	41,554	84,958	53,311	280,215	34,395	—	—	—	—
1838.	190,264	44,487	111,027	52,395	323,381	35,346	—	—	—	—
1839.	232,832	37,283	129,776	74,547	422,842	52,585	—	—	—	—
1840.	232,656	29,279	110,732	77,771	388,127	58,496	—	—	—	—
1841.	236,108	35,141	105,951	56,035	336,538	54,064	—	—	—	—
1842.	286,995	33,925	131,989	95,876	408,705	92,336	—	—	—	—
1843.	313,908	37,740	129,337	118,524	442,931	128,047	—	—	—	—
1844.	310,812	54,146	163,778	148,769	532,870	186,638	—	—	—	—
1845.	342,435	56,785	179,803	162,514	562,206	197,657	—	—	—	—
1846.	345,893	64,036	172,291	179,399	589,082	186,271	12,148	—	—	48
1847.	327,539	77,579	201,481	186,153	656,275	134,302	19,048	334,761	4,087	3,186
1848.	352,431	75,149	217,071	183,623	800,073	274,364	15,447	201,177	2,307	5,753
1849.	—	92,713	268,483	353,507	892,403	339,999	—	—	—	—
1850.	—	117,351	310,616	282,739	912,720	284,935	—	—	—	—

Calculating the saving in transportation, &c., at 50 per cent., Col. Gadsden shows an annual gain to the state of \$70,000 on passengers, and \$400,000 on freights, nearly one half million of dollars, upon railroads, whose cost has been \$5,699,786, independently of the revenue of the road.

Speaking of the Baltimore and Ohio Railroad, the Railroad Journal says: "The immense amount of freight collected on the lines, and destined for the seaboard, rendered it almost impossible for the company with their old arrangements to dispose of it; and as the coal trade grew in importance, it called for greater accommodations than the company were able to give. The amount of passengers carried per annum, 331,170."

The Central Railroad of Georgia, from Savannah to Macon, exhibits the following:

Receipts	.....1844.....	\$328,424
"	.....1845.....	368,450
"	.....1847.....	383,863
"	.....1848.....	500,000

An official report of the City Council of Savannah says: "It is perhaps a remarkable fact in the history of this road, that, projected and commenced as it was in the infancy of such improvements, and from a port on the seacoast with a population of white and black of only about 10,000 persons, to a town distant 190 miles, with only 4,000 persons, and through a country almost a wilderness, it should have sustained itself amid all the embarrassments of the times, and without sacrifice of capital or credit."

The increasing business and the saving in freights upon the canals of New-York, present one of the most extraordinary events of the age. The cost of freight from Buffalo to New-York before the construction of these canals was \$100 per ton. The canal committee supposed it might be reduced to \$10 or \$12, whereas, in fact, the average of freight from Buffalo to New-York from 1830 to 1850 was \$6.81, and in the last three years it has been reduced to \$7.50 per ton, 364 miles. The return rates are higher. With the enlargement proposed, freights will again be reduced one half. Charles Ellet, Esq., engineer on the Virginia Public Works, estimates the freights on canals, exclusive of tolls, 1½ cents per ton per mile; on railroads, 2½ cents; Macadam roads, 15 cents; turnpikes, 15 to 20 cents; steamboats on the lakes, 2 to 4 cents; on the Mississippi and Ohio, ½ to 1½, or an average of ¾ to 1 cent.

If there were wanting other considerations to induce the people of the southwest to enter upon the construction of a system of railroads, extending through every part of their limits, it would be easy to find them in the peculiar position which they sustain with relation to the rest of the world. They have an interest in each other's prosperity, founded upon com-

mon hopes, and fears, and dangers. Menaced, as they are, from so many quarters, it becomes them, in every possible way, to strengthen themselves at home. The interests of Mobile, New-Orleans, Charleston, or Savannah, in each other's advancement are stronger than their interest in the advancement of Boston or New-York. These interests should preclude all jealousies and rivalries, and induce a generous co-operation in every instance where the benefit of the whole south is at issue. Such a course cannot be in conflict with the individual interests of any. By opening or creating new avenues of trade and production, and extending our operations at home and abroad, it is possible for these cities, and all others in our midst, to go on enlarging, and increasing, and extending their influence, without at all affecting the progress of each other. In so wide a field there will be room for all. The progress of Boston has not destroyed New-York, but has rather diverted her energies into new and profitable channels. It was an idea of the Middle Ages, as barbarous as it was false, that one community could only advance at the expense of another. The benefits of trade are reciprocal.

It is not true that we at the south are deficient altogether in the spirit of progress and improvement, and can only be fed by the labors of our fellows. The south has had triumphs enough to satisfy us that the principle of progress is here, though latent for the moment, and that it only requires the proper stimulant to be brought into an activity which shall know no rest. She had at one time the longest railroad in the world, and was the first to project a railroad across the mountains to the banks of the Ohio; an enterprise considered, at the time, the most stupendous in the world.*

The west, too, full of youth and vigor, has a high destiny before her. She finds among us consumers of her bread-stuffs and provisions, to an enormous extent; and when she becomes, as she is destined to be, the great manufacturing centre of the world, her material and her markets will be found in this quarter.† Her

* The Charleston and Hamburg and Louisville Road.—*De Bow's Review*, February, 1851.

† The facilities for manufactures in the west, from the cheapness of labor and of food, the abundance of coal and iron, and the saving in transportation, have already attracted the attention of capitalists in New-England, and found a place among the discussions of the manufacturers of Great Britain. There can be no doubt that the seat of cotton manufactures in America will be on this side of the mountains, and the able arguments and statistics of Hamilton Smith, of Kentucky, have unanswerably shown it. The experiment at Cannelton, Indiana, has answered the highest expectations. In the southwestern states, manufactures, under the new and liberal spirit of enterprise which is dawning among us, must be stimulated into a very high development. What we want is a few judicious heads to take the lead. Even a single resolute and enterprising man could work a revolution here.

interests will be subserved by a more immediate connection with us, and she will find us ready to coöperate heartily in every enterprise which shall make for her interests and progress. New-Orleans, in every period of her history, has been the emporium of the west, and New-Orleans will only give up that distinction after the most unremitting and herculean struggles have exhausted her energies. The sceptre has not yet departed, and if her citizens are true to themselves, the sceptre shall not depart. As the west grows in population, she must consume more of valuable goods favorable to railroads; her rivers, in favoring population, are rather an advantage than an impediment to their construction, and roads may be constructed from the levels existing at one half or one third the cost of the roads in the east.

"The west in sixty years will probably contain one hundred millions of people. The east will then have but twenty millions. The west, in its level surface, cheap materials, and free right of way, may build the best class of railroads, at less than half the cost of the eastern railroads, and run trains on them at a greatly reduced expense. The west offers now the first choice of routes—a choice that a few years will show to be of immense advantage to those who wisely avail themselves of it. In number and variety of exchangeable products, except manufactured goods, the western railroads will obviously have the advantage of the eastern, for freight, and in manufactures the prospect of a great increase is not less for the western than the eastern states. In her auxiliary means of commerce, her navigable rivers, lakes, and canals, the west proffers additional inducements to the construction of roads."

A well-informed authority further remarks of the construction of western and southern roads: "The cost of constructing in the different parts of our territory containing a primitive soil, broken by abrupt hills and deep valleys, is very great. Here but few natural levels are to be found; and the excavation for their tracks sometimes widening along the valleys of rivers, thus prolonging the distance from point to point, have to be made frequently through stony hills, which are often blown up at great expense; tunnels are to be cut through solid rocks, and viaducts built over the frequent streams. This must necessarily be the case throughout the greater part of New-England and eastern New-York, as well as in Pennsylvania, where tracks are laid out, even through ridges of the Alleghany mountains. Such, however, is not the fact throughout the south and greater part of the west, where the land is level, and an alluvial soil, easy to excavate, prevails. There is yet another great advantage possessed by the southern and western roads, so far as cost is con-

cerned, in the circumstance that wood, which is an important expense in the item of propelling the cars at the east, is found in great abundance throughout the greater part of the new country; and from the level character of the soil, the tracks of the railroads may be run in direct lines from point to point. The soil of these sections of the territory is very mel-low, so that the expense of excavation will be comparatively small."

The principle laid down in the following remarks may be assumed to be correct, not only for New-Orleans but for any other city, and should underlay any system of works which may be commenced in the southwest:

"The sum of the commerce of a seaboard city is regulated by the number and extent of the interior cities representing its several tributary basins; to draw off the tribute of one of those cities or basins is to diminish the commerce of the original outlet by a corresponding amount.—If the Chattanooga Railroad draw off the business of Nashville to Charleston, the commerce of New-Orleans is diminished by an amount corresponding to the trade of the Nashville basin. On the other hand, to extend the area tributary to one of her interior cities—to increase its production or stimulate its industry, is a gain to that amount to the business of the seaboard city. For example, to extend the area tributary to the city of Natchez or to the city of Memphis, is a gain to the amount of the extension by the city of New-Orleans."

It thus occurs that the interests of the seaboard city are as much subserved by the interior railroads as if their termini were actually at its wharves, and that a sound policy will not be satisfied with contributions only to roads having such a terminus. It is possible to receive more actual benefit from a road 100 or even 500 miles away, than from another whose locomotive smokes in our suburbs.

There are three classes of roads, whose discussion belongs to the present occasion, and which we shall briefly pass in review, with such statistical details and information as will enable the reader to form an accurate idea of the enterprises, present and prospective, of the southwest and the west, whether of a character tending to the advancement of their own cities, or those of other sections of the Union.

I. In the *first class* will be embraced the roads in the states of Kentucky, Tennessee, Missouri, Arkansas, Mississippi, Alabama, Texas, and Louisiana, as forming a system in which New-Orleans, in particular, has a *primary and paramount interest*.

II. In the *second class* is included the roads of Ohio, Indiana, and Illinois, constituting a system in which New-Orleans may or may not be *beneficially interested*.

III. In the *third class* are the roads of Mas-

Massachusetts, New-York, Pennsylvania, Virginia, South Carolina, and Georgia, all of which, in tapping the resources of the west in a greater or less degree, are drawing upon the resources hitherto controlled by New-Orleans, and may thus be considered *antagonistic roads, to that extent*, though the last three are exercising beneficial tendencies upon the whole south.

We begin with the first class, and take the states in the order in which we have named them :

1. *Kentucky*, which has at present but the short road connecting Louisville, Frankfort, and Lexington, proposes to extend this road so as to intersect the Virginia road at Guyandotte on the one hand, and on the other hand, to connect at the Ohio with the Indianapolis and Madison Railroad, whose ultimate destination is on Lake Michigan. More lately a proposition is in discussion for the construction of a road to the city of Nashville, and thence to Memphis, or more directly to the latter point. A convention has been called to determine upon the practicability of this road. In behalf of the road it has been ably urged :

"The railroads of New-York hold Cincinnati at present within their influence; and, operating from that point, New-York, by drawing trade in the opposite direction, is sapping the prosperity of Louisville. An extension of a Memphis and Nashville road to Louisville will hold trade to its original direction, and, by maintaining Louisville against the otherwise ruinous influence of Cincinnati, preserve the prosperity of Louisville, as part and parcel of the prosperity of New-Orleans. All the trade on the north side of the road from Memphis to Nashville will be caught on its rails and whirled off to New-Orleans.

"On every consideration, it may be concluded that this Louisville and New-Orleans Railroad—a road of 870 miles, in reality, though a road of 700 miles in result—is the first, as it is the best, in the policy of New-Orleans.

"Louisville, situated at a point where much of the business of the upper country must, for a great part of the year, take the rails, on its way to New-Orleans, will necessarily become, under the influence of this road, the greatest city on the Ohio. The road to Memphis being the only means of preventing a change in the direction of trade from Cincinnati, will compel that city to pay tribute to Louisville; whereas, without this road, business following the direction of New-York, Louisville, absorbed into a system, in which, taking the part of an extremity which trade flows *from*, rather than a centre which trade flows *to*, must inevitably dwindle into a tributary to Cincinnati. The importance of this road to Louisville is, perhaps, even greater than to New-Orleans."

2. *Tennessee* having, in course of construc-

tion, or nearly completed, her road from Chattanooga to Nashville, to connect with the Charleston and Savannah railroads, and another road from the same point to Knoxville, intended to be continued to Abingdon, intersecting there the Abingdon and Lynchburg or East Tennessee and Virginia railroad, whose terminus is Richmond, and extending still farther to the north-east, to intersect the Baltimore and Wheeling road, proposes in addition the roads we have referred to as connecting Nashville or Memphis with Louisville, and a road from Chattanooga to the city of Memphis. This last road has been advocated in New-Orleans, as one greatly to her interest in arresting the trade of North Alabama and Middle Tennessee from its present direction to the Atlantic sea-board, and a very handsome subscription was received from its citizens. Whether the road will have that effect or not, may admit of some question. It would seem, at the worst, that the road offers but the choice of markets to the planters of those sections, who otherwise, from the difficulties of reaching the Mississippi River, might *always* take the cars to Charleston in preference. It would seem, also, to be the policy of New-Orleans, that every railroad from the Atlantic sea-board penetrating the valley, should find its terminus *invariably at the river*.

3. *Arkansas*.—This now prosperous and thriving state, with a population of 209,641, and a crop of 100,000 bales of cotton, has not within her limits a single mile of railroad. A citizen of Memphis has proposed two roads for the people of Arkansas, which we have understood meet with great favor in that state. 1st.—A road from opposite Memphis to St. Francis, with two branches from that point, one into the heart of Missouri to Erie, on the Osage river, and the other to Little Rock, the capital of the state. 2d.—A road from Little Rock to Lagrange, on the southwestern extremity of Arkansas, to connect with a road at that point extending to Natchez, Miss. These roads form a system for Arkansas which must exert an extraordinary influence in developing her resources, and putting her far in advance of her present position in this era of progress. The arguments in their favor are thus strongly summed up by Mr. Hewson :

"The road from Memphis to the Osage must form the basis of a system of roads. Though only some two hundred and fifty miles long, it suggests, indeed will force, junctions, extensions, branches, to an extent much greater than its own. The branch from St. Francis to Little Rock, the first link in a southern route to the Pacific, will be 90 miles long. A branch road westward from Elizabeth will open up the country to the head waters of White River. A northeasterly branch from Jackson, or Canton

in Arkansas, will penetrate the great mineral district of Missouri. A connection at Erie, or some other point in the valley of the Osage, will tap the St. Louis 'Pacific Railroad' on its route easterly. This Osage road must, necessarily, be the parent of all these. It will, therefore, identify New-Orleans with the great future—lying within and without the state of Missouri. Traversing a country teeming with industrial resources—coal, lead, zinc, copper, iron—it will make New-Orleans the market of the greatest manufacturing city in the Mississippi valley, namely, the city of Memphis, when acted on by this road. This road may be said to be not so much a work of development as of creation—the creation, however, of an unequalled, and still more of an unassailable, commercial greatness. But even now the farmers in the valleys of White River and of Arkansas River are crying, like Sterne's starling, 'I can't get out.' Gentlemen of New-Orleans, pray help those thrifty fellows to bring grist to your mill. 1,200,000 dollars will, most likely, build a railroad from Memphis to Little Rock. A land donation from the government—obtainable for the asking—may be made to yield (and the sales should be made on the condition of settlement) at least 500,000 dollars; Arkansas and Memphis will subscribe 800,000 dollars; and surely you, gentlemen, are sufficiently interested in this road to subscribe the balance—400,000 dollars. You will not trouble yourselves in the matter! But better things are to be hoped of you. An untamed earthquake tore those Arkansas and Missouri riches from the bowels of the earth for you; speak the word, and a tamed, a harnessed earthquake shall lay them at your feet.

"A railroad from Natchez, by way of Red River to Little Rock, recommends itself to the support of New-Orleans, by the influence it must exert on the development of the whole of northern Louisiana and southern Arkansas; and above all, in the advancement of the present incipient state, inhabited chiefly by that interesting people, the Choctaws. This road defines a system of roads that, under its fostering influence, will spring up immediately on its completion: it bends sufficiently westward to unlock the trade of north-western Texas by a branch road: it runs far enough towards the borders of Arkansas to insure a future extension to the upper Arkansas, in the territory of the Oberokees and Creeks: and in conjunction with a Memphis and Little Rock road, its upper bend runs sufficiently westward to place the starting point of a southern route to the Pacific on the borders of Texas."

4. *Mississippi*.—With only the short road which connects Jackson with Vicksburg, which has been lately extended to Brandon, now in

operation throughout her limits,* Mississippi proposes to extend that road still further to the Alabama line, and thence to Montgomery, and also to connect Jackson with Holly Springs on the one hand, through the richest portions of her territory, and on the other with New-Orleans by whatever route shall appear most advantageous. She also is contributing largely to the construction of a road through her eastern limits which has its terminus at Mobile. Of the New-Orleans and Mobile termini we shall hereafter speak.

A committee of the citizens of Vicksburg reports to the convention which lately assembled in New-Orleans, in regard to the Alabama road:

"This road is to extend from Jackson, Mississippi, to Montgomery, and will connect at Selma with the Alabama and Tennessee River Railroad, by which, and the roads now under contract and in contemplation, a continuous railway communication will be opened through Tennessee, Kentucky, and Ohio, with the lakes—and through Tennessee and Virginia with all the Atlantic and Northern states, and at Montgomery will connect with the railroads running east through Alabama, Georgia and South Carolina. It will pass, in the state of Mississippi, entirely through the counties of Rankin, Scott, Newton and Lauderdale; and in Alabama, before it reaches Selma, one of the termini of the Alabama and Tennessee River Railroad, it will pass through Sumter, Marengo, Perry and Dallas counties. Nearly all of these and the contiguous counties, both north and south, now haul in wagons their cotton and other articles of export to the Tombigbee and Alabama rivers, and ship them thence to Mobile. The counties of Sumter, Marengo, Perry, Green and Dallas, produce annually about one hundred and fifty thousand bales of cotton, all of which now goes to Mobile, but much of which will probably be turned to New-Orleans by means of this road. In fact, nearly all the products of East Mississippi and Western Alabama, and their supplies for that region of country, will probably find their way upon this road, and the branch extending through the northeastern part of Mississippi. The southern route then will become the great thoroughfare of northern and eastern travel. It will develop the mineral resources of North Alabama. Its rich and inexhaustible mines of iron are now worked in spite of the difficulties of getting to a market, and it will create and open a way to trade, the vast extent of which cannot be too highly estimated. We think it within bounds to assert that 200,000 bales of cotton will probably come over this road, and the branch extending through the northeast-

* The few other very short roads are scarcely worth mentioning.

ern portion of Mississippi to New-Orleans, not one bale of which now ever reaches it. Detailed estimates, made by an engineer who has surveyed the route from Brandon to the Alabama line, of the amount required for the completion of the road that far, are in our possession, and may be set down in round numbers at one million of dollars. If New-Orleans were to pay the whole cost of building the road that far, it would return to her in the increase of trade alone, without estimating the other advantages, a handsome profit upon the investment. But there are inducements to render the stock of this road valuable, that are not presented by any other railroad in the United States. From Jackson to Brandon—fourteen miles and a half—the road is completed, and in profitable operation. These fourteen and a half miles, with the cars, locomotives, fixtures, depots, town lots, &c., attached to the road; sixty choice and picked negroes; the two per cent. fund now on hand, being about \$12,000, and that which may hereafter be received, now the property of the state of Mississippi, and valued, upon a careful estimate by the President of the Southern Railroad, including the grading and labor done east of Brandon, at \$378,000, are all offered, by a recent act of the Legislature, as a bonus for the organization of this company, and the completion of the road to the Alabama line in six years. This act was passed in 1850, and provides that the whole property shall come into the possession of the company so soon as twenty miles of the road beyond Brandon has been finished.

"To organize the company requires a subscription of \$500,000 of stock, with a cash payment of \$50,000, immediately upon which the company becomes the owner of nearly a half million more of valuable and active property. This statement shows of itself a conclusive inducement to take stock in this road, and renders it absolutely certain that it will be valuable.

"But there are other causes at work to render this road profitable stock. Congress has already displayed a liberal spirit in the donation of public lands to similar works, and the Senate has twice passed bills in behalf of this road, granting lands to aid in its construction, worth, at the government price, over one half million of dollars. It is believed a similar bill will become a law at the next Congress."

The Holly Springs road was proposed by Col. Walters, who offered the following resolutions, which were unanimously adopted in the Convention, and sustained them in a speech of great force and ability:

Resolved, That the citizens of North Mississippi be, and they are hereby earnestly solicited to procure from the legislature of that state a charter for a railroad from Jackson, Miss., to Holly Springs, Miss.

Resolved, That should said charter be procured, that the citizens of New-Orleans, Louisiana, and Jackson, Mississippi, through their representatives in the Convention, pledge themselves for a liberal aid (should the same be necessary) in constructing said road.

Resolved, That the citizens of Western Tennessee and South Kentucky be, and they are hereby earnestly solicited to procure from the legislature of their respective states a charter for a railroad to extend from some point on the southern boundary line of Tennessee, to some point in Kentucky, opposite or near Cairo, Illinois.

Resolved, That should said charter be procured, then the city of New-Orleans, through its representatives in this Convention, pledges itself for a very liberal aid in the construction of said road.

5. *Alabama*.—The railroads of this state, which are now confined to the Montgomery and West Point road in the direction of Atlanta, and a fragment of the Charleston and Nashville road, open out into several vast and important projections, which are pressed by the people with a zeal and activity that are the guarantees of the highest and most brilliant success. These roads are—*The Mobile and Ohio Road; The Selma and Tennessee Road; The Blakely and Girard, or Georgia Road.*

And first of the *Mobile and Ohio Railroad*: This road has a total length of 521.8 miles, and is estimated to cost \$9,700,000. Of the distance—

164 miles are in Alabama.	
191	" Mississippi.
127	" Tennessee.
40	" Kentucky.

The citizens of Mobile have, by an almost unanimous voice, voted a tax upon their real estate of \$300,000 for the benefit of the road, and it is now proposed, with very general concurrence, to raise this tax to 2 per cent. *per annum* upon all the real estate of the city for five years, the tax-payer, as now, to be entitled to his assessment in stocks of the company. An appropriation of one million acres of public domain has been made to the company, of sufficient value, it is thought, to iron the entire line, and furnish it with ample equipments for a large through business. In Mississippi the Boards of Police have been authorized by law to subscribe to the extent of \$100,000 each to the road, after obtaining the vote of the people. The county of Noxubee was the first to act under the law by an overwhelming majority. A portion of the iron has been contracted for, deliverable at Mobile for \$38 per ton, T pattern, of 65 lbs. The principles of the Mississippi act, allowing the counties to subscribe in a *corporate* capacity, extends to *all* railroads which may be

undertaken in the state, and admits of the issue of county warrants at twelve months, bearing interest to meet the subscription.

The total population upon the line of the Mobile and Ohio road is estimated at 725,322. It is argued for the road :

1. That the planters on the route, from the difficulties of river navigation, are kept back two months from market, and pay from \$3.50 to \$7 transportation on a bale of cotton, whilst the railroad will furnish it for \$2.50 to \$3.50; that corn will be delivered to these planters from Tennessee, for 25 cents, against 50 and 75 cents at present, and bacon at half the present rates, and so of other articles of consumption.

2. The corn, wheat, hemp and tobacco growers of Tennessee and Kentucky, will be furnished with a steady and uninterrupted market; the iron miners of central and western Tennessee will enjoy the same facilities;

and the 100,000 bales of the Tennessee River cotton, which now takes a voyage of 1,800 miles to a market.

3. That the road will enjoy much of the transport of passengers and merchandise now passing from New-Orleans to the Ohio, or downwards, by 250 steamers, averaging 75 passengers, and 400 tons, or in all, 375,000 passengers, and 2,000,000 tons freight annually.

4. That the road will be a great trunk, offering a safe transit from the gulf to the lakes in 44 hours of time.

The last report of the Company contains some statistics of distance, prepared with much labor, from which we form a table as evidence of the great disadvantages of our water conveyances at New-Orleans, in comparison with railroads, whether to Mobile or to our own city :

TABLE OF COMPARATIVE RAILROAD AND WATER DISTANCES.

	Miles.		Miles.
Jackson, Mississippi, to Mobile, (R. R.)	221	To New-Orleans, by Vicksb'g and river	420
Vicksburg, " " (via Jackson),	268	" " " via river.....	268
Tennessee River to Mobile, (R. R.)...	346	" " " ".....	1,845
Memphis to Mobile, via Lagrange R. R.,	428	" " " ".....	808
" " " " " " " " " " " "		" Savannah, via R. R.....	625
Huntsville to Mobile, via Decatur R. R.	445	" " " ".....	509
" " " " " " " " " " " "		" New-Orleans, river.....	1,432
Gunter's landing to Mobile,.....	462	" Savannah, R. R.....	429
" " " " " " " " " " " "		" Charleston, R. R.....	600
Nashville to Mobile, via River and R. R.	475	" Savannah, R. R.....	584
" " " " " " " " " " " "		" New-Orleans, river.....	1,531
Mouth of Ohio to Mobile, R. R.....	492	" " " ".....	1,046
" " " " " " " " " " " "		" Baltimore, R. R., &c.....	1,143
" " " " " " " " " " " "		" New-York, by river, R. R. and lake.	1,415
" " " " " " " " " " " "		" Philadelphia, river and R. R.....	1,296
" " " " " " " " " " " "		" Savannah, via Nashville R. R.....	770
" " " " " " " " " " " "		" Charleston, " ".....	789
St. Louis to Mobile,.....	696	" Baltimore.....	1,853
" " " " " " " " " " " "		" New-Orleans, (river).....	1,256
" " " " " " " " " " " "		" Baltimore, by river to Cincinnati and	
Louisville to Mobile, R. R.....	700	" Wheeling, (R. R.).....	816
Cincinnati to Mobile, ".....	736	" New-Orleans, (river).....	1,408
" " " " " " " " " " " "		" " " ".....	1,546
" " " " " " " " " " " "		" Baltimore, (R. R.).....	856
" " " " " " " " " " " "		" New-York, ".....	796
" " " " " " " " " " " "		" " " via Buffalo.....	915
" " " " " " " " " " " "		" Boston, (R. R.).....	975
" " " " " " " " " " " "		" Richmond, ".....	970
Chicago to Mobile, R. R.....	867	" New-Orleans, (canal and river)....	1,624
" " " " " " " " " " " "		" Boston.....	1,087
" " " " " " " " " " " "		" New-York.....	1,025

The second important railroad projection in Alabama is the Alabama and Tennessee River Railroad, commencing at Selma, and extending to Gunter's Landing on the Tennessee, with proposed branches to Chattanooga and Rome. This road, too, has been advocated in New-Orleans, and subscriptions received upon the ground of immediately shortening the

route of travel to the north. Selma is on the route of the Vicksburg and Jackson road extended to Montgomery. The subscriptions to this road were already \$923,000 six months since, of which Mobile had taken \$200,000; to which is to be added an appropriation of \$238,806 from the legislature. The cost of the road to Gadsden on the Coosa River, in

the direction of Rome, is estimated at \$2,198,696. Large labor subscriptions are counted on, and appropriations of valuable government lands. An independent railroad has already been chartered from Gadsden to Gunter's Landing on the Tennessee, and the two companies will combine. Distance from Gadsden to Selma, 160 miles; from Gunter's Landing to Selma, 200 miles. The Alabama river is always navigable to Selma.

It is argued for this road, that it will shorten the distance of travel as follows:

Boston to Mobile via Richmond, Charleston, Atlanta, Montgomery, &c., 1,803 miles.

Boston to Mobile via Winchester, Abingdon, Va., Knoxville, Tenn., Rome, Selma, &c., and Alabama River, 1,582 miles.

New-York to Mobile, by the present route of travel as above, by Charleston, &c., 1,565 miles.

New-York to Mobile by proposed new route of Selma road, 1,344; Philadelphia old route by Charleston, 1,476; by Selma, 1,258; Baltimore old route, 1,379; by Selma, 1,158 to Mobile.

Of course, with the Mobile and Ohio road, or the road from Selma to Jackson and to New-Orleans, the distance will be shortened in a still greater degree as well as the time. The road intersects an abundant mineral and rich agricultural country in the greater portion of its extent, and the chief engineer says:

"It is a link in the great chain of railroads now constructed and projected on the most direct, shortest, and most expeditious route which can be selected, to connect the Gulf of Mexico with the middle and the northeastern Atlantic states; a route which will present one continuous line of railroads, passing through the most healthy and picturesque sections of the Union.

"This great chain of railroads may be said to commence at Portland, in the state of Maine, thence to extend to Boston, New-York, Philadelphia, Baltimore, and to Winchester, Virginia; up to this town the line of railroads, with short gaps of steamboat travel, is now completed; thence to Staunton and to Abingdon, through the great valley of Virginia, and on to Knoxville, Tennessee, a part of the route is under contract. From Knoxville to the Georgia railroads, the connection by railway will soon be completed. From the Georgia roads the connection with your railroad, either from Rome or Chattanooga, will naturally follow the completion of your enterprise; indeed, it may be anticipated, charters having been obtained at the last sessions of the legislatures of Georgia and Alabama, for a railroad from Jacksonville, in Benton county, to Rome, or to some point farther south on the Georgia State Road, as may be found most practicable."

The third great road is that from Blakely, on the Bay of Mobile, to Girard, opposite

Columbus, Georgia, on the Chattahoochee River.

Length of the road 238 miles, or perhaps 230. Estimated total cost, \$2,981,816.*

This route proposes to connect New-Orleans and New-York in seventy-six hours. Thus:

	Miles	Hours
New-Orleans to Mobile, steamer.....	160	10
Mobile to Girard, (railroad proposed).....	220	11
Girard to Fort Valley, (now constructing)...	71	3½
Thence to Macon, (built).....	25	1½
Macon to Augusta, (built).....	169	8
Augusta to Branchville, (built).....	78	3¾
Branchville to Manchester, (built).....	46	2½
Manchester to Wilmington, (to be built)...	148	7½
Wilmington to New-York, (built).....	504	29½
	1,497	76

6. Texas.—We are not aware of any railroads at present completed in Texas, though, considering the fertility of many parts of that state, the interruption in the navigation of its rivers, and the growing population, there would seem to be a necessity for her immediate action. The people of New-York are already controlling the trade of Texas by her

* The friends of the road say: "We have no disposition to disparage, in the least, the importance or the profitableness of the Memphis and Charleston road; we regard it as an enterprise which is demanded by the wants of the country, and one which promises to remunerate its owners. Our only object is to expose the folly of the pretensions which it makes to the patronage of New-Orleans capital. And first, as to the claim set up in favor of this road, on the ground of its being a part of the most direct route between New-Orleans and New-York. The Memphis and Charleston road, we have just seen, intersects the Nashville and Chattanooga road at Crow Creek, which is forty miles west of Chattanooga. From that point, the route, east, is by the way of Dalton, and thence, north, by the Dalton and Knoxville railroad. It is probable, however, that a road will be chartered and built from Chattanooga to Cleveland, on the East Tennessee road, which would save a distance of forty miles, by cutting off the angle made in running down to Dalton. We will allow that road to be built, and it will then be seen that the two routes from New-Orleans to New-York, the one by the way of Memphis, and the other by the way of Mobile, and thence, by the Mobile and Girard road, through West Point and Atlanta, will intersect each other at Cleveland, on the East Tennessee railroad. From that point to New-York, the route is the same to both. In estimating the comparative distance of the two routes, therefore, we have only to take into consideration the distance from Cleveland to New-Orleans. From Cleveland to Memphis, the distance is 351 miles, and allowing Gov. Jones' rates, twenty-five miles per hour, the time required is fourteen hours. From Memphis to New-Orleans, Gov. Jones allows two days and twelve hours, making the entire time from Cleveland to New-Orleans, three days and two hours. We will now estimate the time over the Mobile and Girard railroad, and through West Point, Atlanta, and Dalton. From New-Orleans to Mobile Bay, fifteen hours; from Mobile Bay to Columbus, nine hours; from Columbus to Cleveland, Tenn., ten and a half hours, making the total time one day and ten and a half hours—a difference of forty hours in favor of the lower route! A difference, which, apart from the greater safety and certainty of the lower route, would always command the mail and the great body of the through travel."

gulf ports. A route for a road has been examined by Colonel Johnson, from Lavaca Bay to El Paso, on the Upper Rio Grande. We are confident that these surveys, when completed, will show that the southern route for a railroad connecting the Gulf of Mexico with the Gulf of California, extending from Galveston or Lavaca Bay, by El Paso, is far preferable to the northern route through Missouri. It is shorter, and the country is so uniform, rising by regular gradations from the gulf on the east to the summit of the table-lands of the Gila, and declining by equally regular gradations to the Pacific coast, that the cost of constructing a railroad on this route will scarcely amount to two thirds of the cost on the northern route.

Texas has a deep interest in connecting herself with the great public works of the United States, and she has public domain enough to build more roads than are in all New-England. A grand trunk road from Austin, with branches to Houston and Galveston, passing in the vicinities of Montgomery, Washington, San Augustine, Nacogdoches, would enter Louisiana in about the same parallel of latitude with Alexandria, and connect with the proposed road from thence to New-Orleans. In the other direction, her roads should radiate towards New-Mexico and the valleys of the Pacific. The committee have been instructed, particularly and urgently, to invite the coöperation of Texas.

A railroad from Brasos, Texas, across to Harrisburg, on the Buffalo Bayou of the Bay of Galveston, is commenced, and 20 miles contracted to be finished this year. Efforts are being made to connect San Antonio with the coast. Other roads with great merits might be constructed from Houston to Red River, near the head of the Trinity, and south-westwardly through Columbus and Seguin to San Augustine. The San Antonio and Gulf road has already been chartered, and \$150,000 subscribed towards its construction.

7. *Missouri*.—The people of Missouri already display a degree of energy and enterprise in matters of railroad construction, which place them on a level with the most advanced states of the Union. There are now two projects before the Legislature, one to authorize the Pacific Railroad, with a capital of \$4,500,000, and the Hannibal and St. Joseph's Railroad, with a capital of \$4,500,000. Total, \$9,000,000, of which \$800,000 is to be raised by state credit. The last bill has become a law. The St. Louis and Cincinnati Railroad is another great project, towards which the city of St. Louis has subscribed \$500,000. Other roads, it is believed, are projected in the direction of Arkansas.

8. *Louisiana*.—Here, fellow-citizens, would be the proper place to introduce some remarks upon the proposed railroad enterprises in Louisiana, which are now attracting so large a

portion of the public attention, and which gave rise to the late Jackson and Opelousas Railroad Conventions, were it not that the committee deem it desirable to postpone that subject to the closing pages of this pamphlet, where it can be treated as a subject complete in itself, but only capable of being thoroughly understood after a familiarity with the details of many other matters connected with the railroads of the Great West and the Atlantic seaboard.

II. The *second class* of roads, in which it has been held that New-Orleans has but a secondary interest, are the roads of Indiana, Illinois, and Ohio. So far as these roads are seeking an Atlantic terminus, they militate against the interest of New-Orleans; but so far as they are employed in developing the resources of the northwest, increasing population and traffic, may be made a part of our own proposed system of works, they are, or may become, of positive benefit to her and to Mobile, perhaps even in a very high degree.

1. *Ohio*.—There are four great lines constructed east and west through the state. There are four lines completed, or in progress, from north to south. These roads are: The Cincinnati and Sandusky, completed 218 miles; Cincinnati, Cleveland, and Columbus, 203 miles completed; the Sandusky, Mansfield, Newark, and Portsmouth line, 221 miles completed or in progress; Cleveland and Wellsville line, 88 miles, constructing; Cincinnati and Belpre line, 204 miles, in the state, constructing; Ohio Central line to the Indiana line, 243 miles, in the state; the Pennsylvania and Ohio Railroad to the Indiana line, 263 miles, in the state; Lake Shore line, 165 miles. Total, 23 roads, 1,705 miles; of which 672 miles are completed, and 748 are in construction. The Cincinnati and St. Louis road will pass in its greatest extent through the states of Indiana and Illinois. Most of these roads, in addition to the great canals to the lakes, are engaged in conducting trade to the east. Several of them, however, will connect with the roads contemplated from the southwest. The following is the position of the St. Louis and Cincinnati Railroad:

"Several years ago, a charter was granted by the state of Indiana, incorporating a company to construct a railroad from Vincennes to Cincinnati. This charter was ratified and adopted by the state of Ohio. Subscriptions of stock to this road, including the amount to be taken by the city of Cincinnati, have already been obtained to the amount of about two millions of dollars. The surveys have been nearly completed, over a most favorable route; and we believe the lettings of contracts on the eastern end of the line have already been made. At all events, the subscriptions already obtained insure the early completion of the road, beyond a shadow of a doubt. Two years ago, the Legislature of Illinois refused

the right of way to this road through the state; consequently, the Indiana charter only embraced the road from Vincennes to Cincinnati. But at the late session of the Illinois Legislature more reasonable counsels prevailed, and a charter was granted for the continuation of the road from Vincennes to Illinois town. The length of the road from here to Vincennes will be less than 150 miles, and from Vincennes to Cincinnati about 180 miles, making the entire distance by the road from here to Cincinnati less than 330 miles. It is believed that the entire road can be built in the most substantial manner, at a cost of about \$20,000 per mile, which would give six millions six hundred thousand dollars as the aggregate cost of the entire road."

2. *Indiana*.—The following is very nearly a correct list of the railroads of Indiana, and shows very favorably for the enterprise and wealth of that state:

	Length.	Completed.	Constructing.
Madison and Indianapolis.....	88	88	—
Shelbyville and Edinburgh....	16	16	—
" Knightstown..	26	26	—
Evansville and Shelbyville.....	19	19	—
Indianapolis and Bellefontaine.	83	28	55
New-Albany and Salem.....	100	27	73
Jeffersonville	66	8	58
Lafayette and Indianapolis.....	61	—	61
Peru and Indianapolis.....	70	—	70
Crawfordsville and Lafayette... 26	—	—	26
Evansville and Illinois.....	50	—	50
Lawrenceburg and Indianapolis 87	—	—	87
Junction	38	—	38
Terre Haute and Richmond.....	141	—	141
Richmond and Newcastle.....	50	—	50
Martinsville and Frankfort.....	20	—	20
Southern Michigan.....	100	—	100
Richmond and Ohio.....	4	—	4
Cincinnati and St. Louis.....	160	—	160
	1,905	212	993

3. *Illinois*.—Through this state it is proposed to extend the Mobile and Ohio Railroad to the shores of Lake Michigan. A point in Illinois, upon the Ohio river, is claimed as the *centre of the Union*, and an effort is being made to divert the terminus of the Mobile and Ohio Railroad from Cairo to that point. A

great central railroad is projected through the state from the Ohio to Lake Michigan, with several branches; and Congress has appropriated 2,500,000 acres of land in aid of the work. "This road is part of that great chain of railroads of which the Erie Railroad is the first great link. The extension of the Michigan and Southern Railroad will connect Dunkirk, New-York with Chicago, and parts of this connection are already constructed.

III. The *third class* of roads, &c., to which we referred, and distinguished as *directly engaged* in tapping the resources of the Valley of the Mississippi and Ohio, and taking away from the cities of the southwest the elements of their past commercial empire, are those of Boston, New-York, Pennsylvania, Baltimore, Richmond, Charleston and Savannah. With so many drains opened at once upon our resources, and without corresponding and countervailing efforts, it must be evident that the greatest prosperity in the world will be in the end capped and destroyed. We shall take a brief review of these rival routes.

1. *Boston*.—The Great Western Road of Massachusetts connects Boston with Albany—a distance of 200 miles. At this point it intersects with the Albany and Buffalo Road, 323 miles in length, commanding the resources of Lake Erie, and, by the tributary canals and railroads in that quarter, much of the resources of the whole northwest. This road has, in a few years, given extraordinary prosperity to Boston, and it is now proposed to expend several millions of dollars in shortening it a few miles.

2. *New-York* having realized the benefits of her great canal to Buffalo, and finding it insufficient for the enormous demands of trade, has constructed by its side her great Erie and Albany road. Perceiving, however, that this road is serving as a feeder for Boston, from the winter obstructions on the Hudson, she has more lately completed a road extending directly from her doors to the great lakes. The canal is also to be widened at an enormous cost, so as to become adequate to the demands upon it.*

* NEW-YORK AND NEW-ORLEANS IN WESTERN TRADE.

1. <i>New-York Population</i>	1840.....	2,429,721	Canal Trade.....	66,303,803
" " ".....	1850.....	3,003,813	" " ".....	156,397,329
An increase of 25 per cent. in population, and 150 per cent. in trade by canals, in ten years.				
2. <i>Produce of West received by New-York Canals</i>	1842.....	\$22,751,013		
" " " " ".....	1850.....	55,474,937		
An increase of 145 per cent.				
3. <i>Produce of West received at New-Orleans</i>	1842.....	\$43,716,045		
" " " " ".....	1850.....	96,897,373		

Or an increase of 120 per cent.; or a comparative increase by New-York of 25 per cent. over New-Orleans in western produce in 8 years! In the three years 1848, 1849, and 1850, the receipts at New-Orleans by river were 2,312,131 bbls. flour; at New-York, 8,636,207 bbls. Pork: New-Orleans, 1,536,817; New-York, 211,486 bbls. Beef: 290,901 bbls. New-Orleans; New-York, 264,072 bbls. Wheat: New-Orleans, 852,497 bushels; New-York, 8,798,759. Corn: New-Orleans, 9,758,750 bushels; New-York, 11,178,238. Bacon: New-Orleans,

3. The railroads of *Philadelphia*, extending westward, are the roads to Pottsville, intersecting the line of the Baltimore and Ohio Railroad, and the Philadelphia and Pittsburgh route of 400 miles, composed partly of railroad and partly of canals. "The traffic on this mixed line of transport is conducted so as to avoid the inconvenience and expense of transhipment of goods and passengers at the successive points where the railways and

canals unite. The canal boats are divided into segments by partitions made transversely, and at right angles to their length, so that each boat can be, as it were, broken into three or more pieces. These several pieces are placed each on two railway trucks, which support it at its ends, a proper body being provided for the trucks adapted to the form of the bottom and keel of the boat. In this manner the boat is carried in pieces with its

135 million pounds; New-York, 36 millions. Lard: New-Orleans, 392 million pounds; New-York, 21 millions. Butter: New-Orleans, 8 million pounds; New-York, 97 millions, &c., &c.

A. Increase in the Business of Roads and Canals employed in taking Produce from the West to the Atlantic Cities.

REVENUES OF PUBLIC WORKS.

	1846.	1847.	1848.	1849.	1850.
New-York Canals.....	\$2,756,103	\$3,635,381	\$3,252,212	\$3,966,906	\$3,326,003
Pennsylvania Works.....	1,196,977	1,295,494	1,587,905	1,633,277	1,713,848
Ohio Canals.....	612,302	805,019	785,869	713,173	798,085
Illinois ".....	—	—	87,900	118,849	136,331
Indiana ".....	—	—	108,104	134,659	157,173
Total Canals.....	\$4,565,382	\$5,735,894	\$5,822,083	\$5,866,294	\$6,018,340
Erie Railroad.....	\$210,180	\$248,320	\$202,326	\$305,053	\$1,000,700
Little Miami ditto.....	116,062	291,180	290,085	321,303	406,997
Michigan Central.....	277,478	347,555	373,931	600,986	860,559
Georgia ".....	400,935	383,863	682,054	628,813	753,383
Macon and Western.....	198,430	147,768	161,659	198,517	207,040
Philadelphia and Baltimore.....	563,555	643,066	638,102	627,904	687,700
Reading Railroad.....	1,900,116	2,001,945	1,693,565	1,983,690	2,360,786
Baltimore and Ohio.....	797,064	1,101,936	1,213,064	1,241,705	1,343,806
Total eight roads.....	\$4,308,759	\$5,096,691	\$5,944,246	\$4,855,871	\$6,219,689

These main roads, as well as canals, have increased their revenues 50 per cent. in the last four years, mostly through the increase of produce transported.—*T. P. Kettell, in Democratic Review.*

5. Up to 1835 there may be said to have been but one route to connect the country west of the Alleghenies with the Atlantic slope, and that was the Erie Canal. There are now four in operation, and still another in course of construction. The following are these lines, with their cost and revenue:

	Miles.	Cost.	Revenue, 1850-	Expense.	Surplus.
Erie Canal.....	364	\$7,143,789	\$2,936,817	\$420,000	\$2,506,817
Pennsylvania Canal.....	395	12,381,824	1,550,555	996,592	553,963
Erie Railroad.....	450	20,323,681	1,063,950	618,419	545,538
Northern Line, N. Y.....	327	14,606,152	2,896,042	1,005,948	1,890,094
Baltimore and Ohio Railroad.....	179	7,227,400	1,387,000	800,000	587,000
Total 5 routes.....	1,715	\$61,745,746	\$9,724,364	\$3,735,962	\$6,083,412
Western Massachusetts Railroad.....	150	7,963,701	1,417,571	607,549	810,022

The revenue of the Erie Canal in 1835, the year the Pennsylvania canals were opened, was \$1,392,130, and that represented all the tolls collected on western trade. This last year that trade has paid on the five lines, to tide water, a sum greater by \$3,410,000, or nearly seven times greater; and, if we remember that the tolls are now very much less than then, we can safely estimate that the trade, west of the Alleghenies, with the Atlantic slope, was ten times greater in 1850 than in 1835. Considerable quantities of goods now pass over Lake Champlain to New-York, and over the railroad to Boston; and the Pennsylvania Railroad, already 174 miles, will open another route to the West.

6. *Distances on Northern and Southern Routes.*—As computed from Cincinnati, the distances to the ocean are as follows:—To Richmond, by Virginia improvements, 823 miles; to Baltimore, by Wheeling road, &c., 941; to Philadelphia, by Pennsylvania improvements, 967 miles; to New-York, by Erie Canal, 1,030 miles; to New-Orleans, 1,611 miles. In a comparison, says Mr. Plagg, of New-York, between New-Orleans and New-York from Cincinnati, there is a difference of 500 miles in favor of New-York; yet, on the untaxed waters of the Ohio and the Mississippi, a barrel of flour is carried in a flat boat for 50 cents, being less than the toll charged by the states of Ohio and New-York on 613 miles of canals, besides the sum required to remunerate the person for transporting the barrel for 1,000 miles, and the inconvenience and delay occasioned by 1,239 feet of lockage. The charge of transit on the Ohio river, by steamboats, is about half a cent per ton per mile.

The disadvantages of the New-Orleans route are set forth by Mr. Cabell, of Virginia, many of which are capable of being removed, and all are, no doubt, greatly exaggerated. The dangers of Mississippi navigation, and higher rates of insurance thereon—storms and hurricanes of Gulf of Mexico—injurious effect of New-Orleans climate on produce, &c. He says the mercantile men of Richmond had better pay 2 cents per

load along the railways. On arriving at the canal, the pieces are united, so as to form a continuous boat, which being launched, the transport is continued on the water. On arriving at the railway, the boat is again resolved into its segments, which, as before, are transferred to the railway trucks, and transported to the next canal station by locomotive engines."

4. *Baltimore* has projected a great line of western railway to the left bank of the Ohio, near Wheeling. The road is already completed to Cumberland, and is being vigorously pressed towards its ultimate terminus.

5. *Virginia* has aroused herself in the general rivalry of the times, and garners her resources for the great canal she has projected, for the connection of the James River and Richmond with the waters of the Ohio. It will touch the Ohio at a favorable point for navigation, and destroy the competition of northern routes during the winter season, when their works are arrested. A canal-boat at Columbus, Ohio, says Governor Floyd, laden with pork, hemp, tobacco, or iron, would greatly prefer going to Norfolk upon this canal, to passing through the lakes and the Erie Canal, to New-York, if the market was as good at one place as the other, for the simple reason, that the distance would be greatly shorter, and the navigation much safer from interruption by ice, and from the dangers of the lake. It is plain, therefore, that such trade as would prefer water-

carriage, and as now reaches New-York, from the heart of Ohio, would find its way through Virginia by means of her canal. It is now completed to Buchanan, 194 miles, leaving a distance of 174 miles to be constructed to the great Falls of the Kanawha.

"The Virginia and Tennessee Railroad will, when completed, form one link in a chain of road from New-York to Mobile and New-Orleans, most of which is already determined upon, and over which will pass a greater amount of travel than this country has ever witnessed. It is the great line which must convey the travel to and from California, from the northern, middle, and partly from the southern states, and over which much of the commerce intended for the Pacific by the Tehuantepec route will likewise be transported. It is worthy of all aid from the commonwealth. When it shall be completed to the Tennessee line, it will have penetrated a country of higher capabilities and greater extent than that through which the Baltimore and Ohio Railroad now passes to Cumberland. And should the Central Railroad decide to go to Cincinnati by Guyandotte instead of to Louisville, then the Virginia and Tennessee Railroad will form a common stem for a branch either from New river, through Giles, Mercer, and Tazewell, to Lexington, Kentucky, or from Abingdon, through the county of Russell, to the same city. The advantages of this connection I developed sufficiently at length in my last annual message, and there-

ton to Richmond than come free to New-Orleans, because of climate, rates of drayage, storage, insurance, commission, &c.; and even freights from New-Orleans, which are often 50 per cent. higher than from Richmond. This is the Virginia account of it.

The rates of tolls upon New-York canals, on western produce, are 2, 3, and 4 mills per mile on each thousand pounds

7. Tonnage New-York and Erie Canal.

	Arriving at Tide-water.	Going from Tide-water.	Total.		Arriving at Tide-water.	Going from Tide-water.	Total.
1836.....	696,347	133,796	830,143	1844.....	1,019,034	176,737	1,195,831
1817.....	611,781	139,130	753,911	1845.....	1,304,948	195,000	1,509,948
1838.....	640,481	142,808	783,289	1846.....	1,363,319	213,615	1,576,134
1839.....	602,138	142,035	744,163	1847.....	1,744,383	298,267	2,032,550
1840.....	689,012	139,580	798,592	1848.....	1,447,005	339,567	1,777,462
1841.....	774,344	163,715	937,059	1849.....	1,679,946	315,550	1,995,496
1842.....	666,676	123,234	789,970	1850.....	2,033,863	418,370	2,452,223
1843.....	836,361	143,595	980,456				

In a report of the Erie Canal appears a table, showing the cost, to the road, of transport upon northern roads per ton per mile, from which we extract the following:—Boston and Worcester road, 9 mills per ton per mile; Pitchburg road, 9 4-10 mills; cost of train per mile, 93 to 66 cents, with useful load of 103 or 103 tons. The cost on Western road, with grades of 83 feet, 1 1/2 cents per ton per mile; cost of train per mile, 83 cents, with useful load of 52 1/2 tons. The Reading road, its managers assert, can carry coal at a cost of 6 mills the ton, their train being fully loaded both ways. The Baltimore and Ohio road contracted at 1 1/2 cents per ton per mile, while their ordinary traffic was costing over 2 1/2 cents per ton. "It is no doubt true, with a large business, and under experienced management, average loads of 100 to 150 tons may be carried, heavy grades excepted, at a speed of ten miles an hour, and a cost of 5 to 8 mills per mile per ton, rejecting the interest on investment." "Flour is now taken from Detroit to Ogdensburg for 30 cents per bbl.; from Ogdensburg to Boston, 380 miles by railroad, at 8 mills per ton per mile, will be 33 cents more, making 60 cents cost without dividends. By the Erie Canal last year the average charges were—Detroit to Buffalo, 19 cents; Buffalo to Albany, 54 cents; Hudson River, 10 cents; in all, 76 cents. The Hudson and Buffalo Railroad, it is estimated, will take flour from Detroit to New-York at 84 cents. The average charge per ton, through, on the Erie Canal last year, varied from \$4 44 to \$6 94. By the enlarged canal it is proposed to bring this down to \$3 40 per ton through!"—(See the Statistics of the Erie Canal, in that valuable work, the *Railroad Journal*, New-York, which, as a magazine of information upon such points as these, every man in this age of steam should have.)

fore deem it unnecessary to repeat them here. There was a mistake made in the state's subscription to this work, which ought to be rectified, and which I earnestly recommend to be done at once.

"Should the Central Railroad reach Cincinnati, it will form the shortest line of road between that great city and tide-water, and will, of course, command an immense amount both of trade and travel. It is a truly great work, and will be ultimately productive of great benefits to the state."

Towards their fellow-citizens of Louisiana and of New-Orleans, in particular, the Committee feel that they have an important duty to discharge. Situated at the mouth of the largest river in the world, with its thousands of miles of tributaries connecting with the most fertile, and wealthy, and thriving regions that the sun has ever shone upon; besides being, in her own agricultural facilities, one of the most favored states in the Union, the progress of Louisiana has been but slow in comparison with many of her sisters, whilst New-Orleans, which was once the proud emporium and mart of the immense empire of the west, sees her trade taken away by piece-meal, by a host of sleepless rivals, until her rank is fast passing away from her, and the grass threatens to grow again in her once crowded thoroughfares.

Fellow-citizens, had New-Orleans been true to herself, she could not now be occupying a position of so much hazard; and the humiliation of such appeals as we are making to you would never have been necessary. In the day of her pride and her power, she deemed that the Deity had lent her armor, and that, the child of fortune and of destiny, she must be for ever invulnerable. Already the evil time has come, and her enemies mock at her, and at the doom which her apathy is threatening to bring upon her. With a position the most favored in the world, New-Orleans should have been the queen of the south and the west, elected by the *unanimous* voices of subjects whom she had conciliated and attached to herself by the liberality of her spirit and the extent of her enterprise. Instead of this, she has preferred to sit in her isolation, without sympathy or coöperation in the works of her neighbors. It is thus that these neighbors, on their way to the seaboard, leave her without one parting symptom of regret.

We have been deceived, fellow-citizens, by the voices of those among us, who, without any permanent interest in the city, or only interested to abstract the most out of it to be expended abroad, or to build up mammoth estates by rapacious exactions, have continually, and upon all occasions, been crying out that "*All is well!*" "Let us eat, drink, and be merry; the old father of waters is garnering for us wealth unbounded, and is altogether the greatest and cheapest and most magnifi-

cent railroad in the world." *We have been deceived.* Had all been well, New-Orleans would have grown with the growth of the west, as St. Louis, and Cincinnati, and Boston, have grown; and we should have had a population of 200,000 or 250,000, and received in produce already \$800,000,000 per annum.* Ask yourselves, however, what are the facts! How many buildings are now untenanted in New-Orleans!† Within a few days we have seen a tributary region slip away, which gave us 100,000 bales of cotton, and 100,000 to 200,000 bales promise, to go in the same direction! Thus our receipts will be diminished at least one third or one half, and what will be the value of the rent-rolls of New-Orleans! *Let property look to its position of peril!* Real estate cannot survive the broken sceptre of trade. It cannot escape to other places like personal property. With trade it lives, and without trade it perishes. To the gripping, penurious, and usurious holder of bonds and mortgages, and lots, and tenements, and enormous rent-rolls, dreading a little public expenditure more than the Asiatic cholera—if such men there be among us, which God forbid—we would say in the language of Holy Writ: "*Let him that thinketh that he stands, take heed lest he fall!*"

What then must be done for New-Orleans! *She must, by a wise and liberal stroke of policy, regain a part, if not the whole, of the trade she has ruinously lost, and open new sources of opulence and power, which are abundant all around her. She can do this by changing and modifying her laws bearing unequally or hardly upon capital and enterprise; by cheapening her system of government; by affording greater facilities and presenting less restrictions to commerce; by establishing manufactures, opening steamship lines to Europe, and conducting a foreign import trade; and finally, and what is of first importance, and should precede every other effort, by MUNIFICENT APPROPRIATIONS TO RAILROADS BRANCHING TO THE WEST, AND THE NORTH, AND THE*

* RELATIVE GROWTH OF NEW-ORLEANS AND THE WEST.

In the last ten years the west has more than doubled its population, whilst New-Orleans has not increased more than 25 or 30 per cent. The average increase of produce at New-Orleans has not doubled in ten years, though the products of the west, as the receipts at Boston, New-York, &c., show, have quintupled.

† NO. VACANT HOUSES IN 2ND MUNICIPALITY, MARCH, 1851.

1st Ward.....	39
2nd ".....	45
3rd ".....	68
4th ".....	17
5th ".....	34
6th ".....	23
7th ".....	73

Total.....399

EAST, FROM A TERMINUS AT HER CENTER, OR FROM TERMINI ON SUCH INTERIOR STREAMS AND RIVERS AS ARE NECESSARILY TRIBUTARY TO HER. Now is the accepted time for action. *To-morrow will be too late!*

The concern of this committee is, however, entirely at present with railroads; and having discussed, with some elaboration, the various routes connecting the south, the east, and the west, their duties will be performed by a reference to the routes now in projection in Louisiana, with the view of connecting her with her neighbor states, and more particularly with the great lines of public works radiating through every section of the Union. These routes are—

1. *The New-Orleans and Jackson (Mississippi) Railroad*, with an ultimate destination to Holly Springs, Tennessee, Kentucky, and the Ohio river.

2. *The New-Orleans and Opelousas Railroad*, with an ultimate destination in Texas, New-Mexico, and as far westward as the demands of population or of industry may warrant.

I. And, first, of the New-Orleans and Jackson Railroad. This road has been advocated in Louisiana and Mississippi upon grounds which entitle it to the highest favor, and several conventions have been held for promoting its construction. A most favorable charter has been procured in Mississippi, authorizing the counties on the line to subscribe for stock by taxation; and a similar charter, it is thought, will be obtained from the Legislature of Louisiana, which meets in January next. Meanwhile a company has been formed, and nearly half a million of dollars in stock has been promised.

The following is the report of the Committee on plans and projects of said road:

"A large majority of the Committee have the honor to report, that two general plans for the connection of New-Orleans via Jackson, with the great systems of railroads now under construction, and projected, in Mississippi, Alabama, and Tennessee, have been presented.

By one plan, it is proposed to construct a continuous railroad from New-Orleans to Jackson; by the other, a railroad from Madisonville to Jackson, and thence to a connection with New-Orleans by steam ferry-boats being used for bringing the trains of railroad cars down the Chefuncte river, and across Lake Pontchartrain to the landing of the Pontchartrain Railroad.

The distance from New-Orleans to Jackson, via Pontchartrain Railroad, Lake Pontchartrain and Madisonville, is 173 miles, of which distance about 30 miles will be steam-ferry. By the located line of the old Nashville Railroad the distance is 192 miles. By a route recently surveyed by Mr. Phelps, passing above Lake Maupias, the distance will be

about 200 miles; and by a proposed line up the river, to the vicinity of Baton Rouge, the distance from New-Orleans to Jackson will be about 213 miles.

The latter route avoids difficult swamps, expensive drawbridges across navigable rivers, and passes through a fertile and well-improved country.

Estimating 80 miles per hour for passenger trains, on a level and straight railroad, the time of passing over each of the routes will be as follows:

1st. By the Pontchartrain Railroad, steam-ferry, and Madisonville route—8 hours 15 minutes.

2d. By the old Nashville Railroad—6 hours 24 minutes.

3d. By the line above Lake Maupias—6 hours 40 minutes; and by the route near Baton Rouge—7 hours 5 minutes.

The majority of the committee are of opinion that the road via Baton Rouge may be constructed in the most substantial manner from New-Orleans to Jackson for two millions of dollars, and that the shorter lines would not cost materially less. The cost of the road from the state line of Louisiana to the town of Jackson will be the same on either route, and may be estimated separately at one million of dollars.

The majority of the committee are strenuously opposed to any interruption of a continuous railroad communication between New-Orleans and neighboring states. The time allotted to the committee will not permit a report in detail; but the majority feel well assured that, on a simple statement of the case, the convention will not hesitate in adopting an unbroken line of railroad communication. On behalf of the majority,

GLENDY BUREK, *Chairman.*"

II. *The New-Orleans and Opelousas Railroad*.—The proceedings of the convention on this road, and which gave rise to the present committee, will be found reported in detail in the number of *De Bow's Review* for August, 1851, as the proceedings of the other conventions are published in previous numbers. The number of delegates was large, comprising the wealth of the state, and the enthusiasm throughout the country is beyond all precedent.

The construction of these two roads is, then, the first great matter upon which the people of Louisiana and New-Orleans must be engaged to regain their lost position, and acquire that rank in the affairs of the nation which nature seems to have marked out for them.

By the one our city will be connected with that great and growing region of Texas, which is destined to be the empire state of the south, and the trade of which will compensate for many losses incurred by us in

other quarters. In the progress of population the road will be extended further, and still further to the westward, until, in less than a generation, it is no chimera to suppose it with a *terminus upon the Pacific*, and conducting the commerce of the two hemispheres! The grand conception of such a road is worthy of America; and judging from the great conventions that have been held in its advocacy, it is an idea that has taken too deep hold upon the public mind ever to be eradicated.

The Jackson road, on the other hand, in seeking to connect us with the northwestern states and the great lakes, and with New-England and the north, through the North-Alabama, Tennessee, and Virginia improvements, is another great work entirely worthy of New-Orleans. This road will greatly facilitate, cheapen, and render safe travel in either direction, as will appear from the following statistics:

NEW-ORLEANS IMPROVEMENTS.

1.—EASTERN ROUTE.

	Miles.
N. O. to Jackson.....	212
“ Columbus via Branch.....	322
“ Gunter's Landing, Tennessee River.....	452
“ Knoxville.....	600
“ White Sulphur Springs.....	770
From the White Sulphur to Richmond, Washington, or Baltimore, about 200 miles by roads already completed; say then in all, from New-Orleans to Baltimore.....	1000

(Forty hours.)

2.—NORTHWESTERN AND LAKE ROUTE.

	Miles.
N. O. to Bonnet Carre.....	24
“ Donaldsonville.....	55
“ Branch to Baton Rouge.....	70
“ State Line.....	110
“ Jackson, (Miss.).....	212
“ Tennessee Line.....	382
“ Ohio River, (Cairo).....	530
“ Chicago.....	830

(Thirty-six hours.)

No grades or inclinations exceeding fifteen feet per mile, nor curves of less radii than 10,000 feet, equal nearly to level and straight. (Ranney.)

3.—WESTERN, TEXAS, AND CALIFORNIA ROUTE.

	Miles. (River.)
From New-Orleans to Plaquemine.....	60
“ “ Opelousas.....	110
“ “ Sabine River... ..	210
“ “ Paso del Norte... ..	710
“ “ Gulf of California.....	1350

A distance to be attained in sixty hours, as there are no snows to be encountered, nor heavy grades.

The committee cannot close their labors without referring to a principle which has been lately resorted to in many quarters in the construction of railroads, and which has been recommended with much unanimity in both of the conventions which have assembled in New-Orleans. The principle is thus stated in the report of Mr. Robb:

“Resolved, That a memorial be presented to the legislature of this state, praying the passage of an act providing substantially as follows, viz:

That the several municipal councils of the city of New-Orleans, and the police juries of the respective parishes situated on the line of the road, be empowered to levy a special tax on the real estate lying within their respective limits, to be called the New-Orleans and Jackson Railroad tax; provided that no ordinance thus passed shall be binding until approved by a majority of the legal voters of the locality, at a special election called for that purpose, and that the tax thus paid by any individual shall entitle him to an equal amount of stock in the company.”

This principle has been resorted to in Kentucky, parts of Ohio, Tennessee, Mississippi, the city of Mobile, &c., with more or less modification, and the legality and constitutionality of it has been sustained in an elaborate decision in the Supreme Court of Kentucky, (Talbot vs. Dent, 9 B. Monroe's Reports, pp. 586, 588. 1849.) The case decides:

“1. The legislature have constitutional authority to grant to town corporations power to tax the property of towns or cities, for the construction of works of internal improvement, for facility of access to, and transportation to and from the town or city. 8 Leigh's Rep. 120; 15 Con. Rep. 475; Ten. Sup. Court. A railroad to a city is such a work.

“2. Taxation by a local corporation for a local purpose, and tending to promote the local prosperity, is within the scope of the corporate powers of city corporations, when sanctioned by the legislative authority, though not consented to by each individual to be affected thereby; the will of a majority is to govern when it is referred to the decision of those to be affected.”

The advantages of such a principle are these: It throws upon *real estate* the onus of those improvements which most certainly and speedily are felt by it in an appreciation of value. It causes all such property to contribute *equally*; and by the distribution of stock into small parcels, gives the whole community a direct and practical interest in the results of railroad improvements, and thus insures greater vigilance and responsibility. It renders railroads practicable in quarters where, from the obstinacy or ignorance of the largest proprietors, they otherwise would not be, and removes from the enterprising the necessity of

being at the *whole expense* of improvements greatly advantageous to the whole public in the long run, though, perhaps, *immediately* unprofitable. It is more unexceptionable than methods of state and corporation loans, or pledged credits, and does not trench upon any principle whose inviolability is essential; since, under proper regulation and limitation, there will be little or no chance of abuse. In the southwest, the large majority are land proprietors, and *must tax themselves* at the same time, and *in the same proportion*, that they tax others; and men are not generally so fond of the tax-collector, that they will willingly and *rashly* adventure themselves within reach of his rapacious hands. Under this system, property will be altogether as safe and well guarded as under republican institutions in general.

Finally, fellow-citizens, *the time has come for us to be astir in the great movements of the age, and let us meet together in one general convention for an exchange of views and plans; for a combination of these, where it is practicable; for a wider co-operation and a more generous rivalry; and for heartily pledging each other a bold, vigorous and sustained effort throughout all the future, in developing our resources and our power, and in strengthening the bonds of fraternity and of concord between us.*

New-Orleans invites you here, and, in the awakening spirit of enterprise throughout her limits, tells you that she is in heart with you, and *will do her whole duty.*

APPENDIX 1.—INSECURITIES AND LOSSES ON WESTERN STEAMERS.—Such has been the frightful loss of life within the past few years, and the enormous loss of property on western rivers, and so hopeless appears to be the case of all remedy, that almost any possible mode of communication would be at once preferred. Public confidence has been shaken in the whole system of western boating, and men begin to feel that the chances of the battle-field might rather be encountered than these. Nothing is safe, nothing secure. We lie down at night upon a volcano, which, in an instant, may hurl death and destruction in our midst. It is idle then to say that railroads cannot compete with steam upon these rivers. Upon their very banks the travel, and much of the trade, would be at once taken off by such roads.

Mr. Chambers, of St. Louis, furnished a year or two ago the list of steamboat accidents in twelve months, which showed 59 steamers, or more than one a week, destroyed; 245 lives, and \$590,000 property, exclusively of personal effects. This was a favorable year, as the loss of life has since reached 500 or more. The dreadful experience of New-Orleans is in confirmation. How frequently, within the last few months, has the work of death been consummated at our levees. The whole number

of steamers built on western waters, from 1830 to 1847, says Mr. Burke, in his Report to Congress on "Boiler Explosions," is 1,915. The losses by explosions alone amount, according to the returns, (admitted to be altogether imperfect,) during the same period, to 198, or about 10 per cent.

APPENDIX 2.—PUBLIC LANDS FOR INTERNAL IMPROVEMENTS.—Government, by virtue of its proprietary, being benefited by the construction of roads, has pursued, to some extent, the liberal system of donating alternate sections, &c., in their aid. In the last two or three years many splendid donations have been made, particularly to the Central Road of Illinois, and the Mobile and Ohio road. The whole amount donated in this way, up to 1847, was 6,693,781 acres, which has since been swelled to ten or twelve millions. The aid to be obtained from public lands for railroads is special to the southern and western states, and is an element of immense consideration.

APPENDIX 3.—RAILROAD PROGRESS IN THE WORLD.—The total amount of railroads now opened in Great Britain (1851) is between six and seven thousand miles. The total miles in the world, in 1849, was 18,656, having cost nearly \$2,000,000,000. It is estimated there were at the same time, in progress of construction, a further extent of 7,829 miles, the cost of which, when completed, would be £146,750,000. Thus, when these latter lines shall have been brought into operation, the population of Europe and the United States (for it is there only that railways have made any progress) will have completed, within the period of less than a quarter of a century, 26,485 miles of railway—that is to say, a greater length than would completely surround the globe, at a cost of about £500,000,000 sterling. To accomplish this stupendous work, human industry must have appropriated, out of its annual savings, £20,000,000 sterling for twenty-five successive years! Of this prodigious investment the small spot of the globe which we inhabit has had a share, which will form not the least striking fact in our history. Of the total length of railways in actual operation in all parts of the globe, 27 miles in every 100 are in the United Kingdom! But the proportion of the entire amount of railway capital contributed by British industry is even more remarkable. It appears that of the entire amount of capital expended on the railways of the world, £54 in every £100, and of the capital to be expended on those in progress, £58 in every £100, are appropriated to British railways!

In about twenty years there have been constructed nearly 7,000 miles of railroad in the United States, and those in progress will probably swell the amount 10,000 miles. The amount expended already reaches \$200,000,000. Of these roads 1,000 miles centre at the city of Boston, and required an outlay

of \$49,221,400. Our whole public works constructed, including every description in the same time, would perhaps reach \$500,000,000. Great Britain, meanwhile, has built 5,000 miles, at a cost of \$550,000,000, and projects 4,000 additional miles, swelling the aggregate to \$1,000,000,000. Her great northwestern road, 428 miles in length, exhausted \$104,000,000 in its construction, sufficient to build our way from ocean to ocean. France has expended \$137,000,000, Germany \$168,000,000, Holland \$39,000,000, and even Russia, despotic Russia, is on her way with three stupendous routes, from St. Petersburg to Warsaw and Cracow, to Moscow, to Odessa, to connect the Volga and the Duna! The passengers increased on British roads from 23,466,896 in 1843, to 57,965,070 in 1848, or more than double, and the receipts from them in the last period were £5,720,382, or about \$30,000,000. The total receipts from passengers and goods had augmented in six years from £4,585,139 to £9,983,551, or from 20 to \$50,000,000. The average cost per mile of British railways is £56,915, or \$275,000, the Blackwall road having cost nearly \$1,500,000 per mile! Her locomotives have reached 67, and, in one instance, 70 miles the hour; the average loss of life being, in 1847, 1 out of 2,887,053 passengers carried, and in 1848, 1 in 6,428,000; the German roads giving only 1 in 25,000,000!

APPENDIX 4.—TEHUANTEPEC AND FLORIDA PENINSULA RAILROADS.—The project of a railroad across the Isthmus of Tehuantepec is one in which the people of the whole south and west have a direct and practical interest, higher than that of other sections of the Union. Though temporarily suspended by the difficulties interposed on the part of Mexico, the work should not be allowed to rest, but every effort, consistent with peace and good-will towards Mexico, should be brought in requisition to carry it through. The road will, practically, make the Gulf of Mexico and the cities upon it the basis of future operations in the Pacific, until some overland communication through the continent has been achieved.

The Florida Peninsula road is also one of great interest, and should be properly represented in the proposed convention. In Florida it has been advocated with much zeal, and a citizen of that state, (Mr. Fairbanks,) in *De Bow's Review*, connects it inseparably with the Tehuantepec. We give an extract:

"The Tehuantepec route is 135 (160 or 170) miles in length, and is as practicable, so far as cost and time of construction are concerned, as that to Panama. The advantage offered by the Tehuantepec route, to compensate for its increased length, is the saving of sea distances from each direction to its termini on the Gulf and Pacific, being 1,200 miles north of Panama. This

saving in sea distance is estimated at 1,700 miles, in making the trip from New-Orleans to San Francisco; the distances being stated at 5,000 miles from New-Orleans to San Francisco, by way of Panama, and as being only 3,300 by way of Tehuantepec; and being from New-York to San Francisco, by way of Panama, 5,858 miles, and by way of Tehuantepec only 4,744 miles—being a saving by Tehuantepec, of 1,100 miles. This immense difference in the sea distances, other things being equal, would seem to be conclusive in favor of the Tehuantepec route. But by the construction, in connection with this Tehuantepec route, of a railroad across the Peninsula of Florida, a still greater saving of sea distance would be made in the distance from New-York. These two projects of constructing railroads across the Isthmus of Tehuantepec of 135 miles, and saving 1,700 miles in the passage to San Francisco, and across the Peninsula of Florida, 135 miles, and saving 1,000 miles in the passage to New-York and Europe, would be achievements in the progress of communication worthy of the spirit of the age, and of the consideration of the people of New-Orleans and the Memphis Convention. These connections made, and you will see that New-Orleans would become the great centre of trade and commerce of a continent. Without the Tehuantepec route New-Orleans is left far to the northward of the great stream of trade and commerce tending toward the Pacific. Without the railroad across the Peninsula of Florida, the steamships connecting between New-York and Tehuantepec or Panama will be compelled to leave her to the northward, or lose several hundred miles; while, with both these roads constructed, (and the Florida route is estimated at less than \$1,000,000,) she becomes the great central point of the commerce of two oceans. It is a magnificent idea to dwell upon, that, by the construction of 270 miles of railroad, New-York and San Francisco are brought within 4,300 miles of each other, and New-Orleans within 3,000 miles; thus cutting off nearly 10,000 miles of the voyage round Cape Horn. And it will not be deemed an extravagant supposition, that, when constructed, 20 days will suffice to reach San Francisco from New-York, and 16 days from New-Orleans.

APPENDIX 5.—WESTERN CANALS.—Whilst referring to the processes by which trade is being carried on with the western states to the east, we neglected to refer to the numerous canals now in successful operation. In addition to the *Great Erie*, there are—

1. *Illinois and Michigan Canal*, 96½ miles long, 60 feet wide, and 6 feet deep; locks 17; total lockage, 158 feet. It connects the Chicago, which empties into Lake Michigan, with the Illinois, at La Salle, 218 miles from

the Mississippi. The Illinois is navigable all the year in flat-boats, and 4 months by steam (the ice season being excluded.)

2. *Wabash and Erie Canal.*—This extends from Lafayette, about 378 miles above the Wabash mouth, where it enters the Ohio, to Toledo on the Maumee, adjacent to Lake Erie, and is 187 miles long. It is intended to complete the canal from Lafayette to the Ohio river. At a place called *Junction* this canal intersects the Miami Canal from Cincinnati. It is probable the Wabash and Erie Canal is now complete to Terre Haute, on the Wabash. The *Muskingum Improvement* extends to the Muskingum River, at or near Zanesville, and is 91 miles long.

3. *Sandy and Beaver Canal*, connecting the Beaver River with the lake from the Ohio. 4. *Makoning Canal*, being a cross canal of 83 miles long. There is a canal called the *Beaver and Erie*, 136 miles long, connecting with the Ohio 28 miles below Pittsburg. The connection with Lake Ontario is by the Welland Canal in Canada, and with Ontario and Champlain by the New-York canals. The points of union of those canals, then, with the Mississippi, are as follows: mouth of Illinois on the Mississippi, 40 miles above St. Louis; mouth of Wabash on the Ohio, 130 miles from the Mississippi; Cincinnati on the Ohio, 550 miles from the Mississippi; Portsmouth on the Ohio, 589 miles from Mississippi; mouth of the Rocking on the Ohio, 756 miles from Mississippi; Marietta on the Ohio, 783 miles from Mississippi; at mouth Little Beaver on the Ohio, 924 miles from Mississippi.

4. *The State of Wisconsin* is now connecting the Fox and Wisconsin Rivers, which empty into the Mississippi and the lakes, by a canal of very short length. An exchange remarks:—"The above bids fair to become one of the most important public improvements ever made in the United States. The connecting the great lakes and the Mississippi River by a route navigable by steamers, must form an era, even in our present advanced state of internal communication. A boat may then load at Buffalo for the Falls of St. Anthony, the Yellowstone, or New-Orleans. The products of the great Mississippi valley will have a direct and cheap route to the Atlantic cities by way of the lakes. Emigrants may then embark at Buffalo or Oswego, and be carried by the same steamer to the spot where they wish to settle. A new impulse will be given to the commerce of the country, and the bonds of our Union made the stronger by the opening of this new route, which is soon to rival all other artificial lines of water communication opened in this country.

WESTERN, AT NEW-ORLEANS, 1852.—Delegates present from twelve states.

Ex-Gov. ALEX. MOUTON, of La., *President*.

Vice-Presidents—C. S. Tarpley, Mississippi; Joseph Forsyth, Florida; Gen. Lucius Q. Polk, Tennessee; William N. Burwell, Virginia; Amos Morrill, Texas; H. Chouteau, Missouri; P. P. Parham, Alabama; J. N. Beadles, Kentucky; Judge James Campbell, Louisiana; Absalom Fowler, Arkansas.

Secretaries—John Calhoun, Victor Wiltz, Louisiana; R. C. Farreley, Arkansas; John Duncan, Mississippi.

Mr. James Robb, of Louisiana, Chairman of the Committee on Ways and Means, stated that the report of that committee was not yet finished, but, with the consent of the Convention, he would give an outline of the same, verbally, and furnish the written report at a subsequent meeting. Having addressed the Convention, he offered the following resolutions on behalf of said committee, which were adopted by the vote of every state represented in the Convention:

Resolved, That the great system of internal communication by railroads through the southern and southwestern states, is an object of such importance as to justify and require a liberal application of the resources of the states interested in these works.

Resolved, That the voluntary subscriptions of private individuals are inadequate to the accomplishment of works of such magnitude.

Resolved, That public lands in the western and southwestern states of this Union ought to be liberally appropriated to the objects now proposed, and that this appropriation ought to be made by a general law, applicable within proper restrictions to all the railroad enterprises in which the people of the west and southwest are interested.

Resolved, That the great additional value given to public lands by railroads passing in their neighborhood, and the augmented revenues derived by the government from the increased population and wealth which result directly from such works, render it peculiarly proper and equitable that the general government, which shares in the benefit, should contribute by grants of land to the cost of such works.

Resolved, That it is the right of the people whenever they may deem it proper, to subscribe through their municipal and parochial corporations for the stock of railroads calculated to advance their interests, and that the legislatures of the different states ought, by law, to authorize their cities, parishes, and counties to make such subscription when desired by the respective inhabitants.

Resolved, That the resources for the payment of such subscriptions when made, ought to be derived from taxes levied on landed property, inasmuch as that species of property is,

more than any other, benefited and enhanced in value by works of internal improvement.

Resolved, That whenever subscriptions are made by cities, counties or parishes, it is inexpedient that the administration of the stock thus subscribed should remain under the control of the local authorities, and that it ought to be distributed amongst those whose property has been taxed for its payment, in proportion to the amount paid by each; to the end that each individual may be stimulated by personal interest to a vigilant supervision of the conduct of the work.

Resolved, That a committee of three be appointed by the chair to address to the Congress of the United States, and to the legislatures of the separate states, memorials in support of the principles contained in these resolutions.

Mr. W. N. Burwell, of Virginia, Chairman of the Committee on Routes, presented the following:

Resolved, That the Committee on Routes regard the following system of internal improvements as not only indispensable to the development of the agricultural, commercial, and mineral wealth of the southwestern states and cities, but also as essential to the equality and unity of the states of this confederacy; and they earnestly recommend the same to the patriotic consideration of the legislatures and citizens of the southwestern states.

1. A national road to the Pacific ocean; with one terminus on the Mississippi River north, and one south of the mouth of the Ohio River, so as to divide the advantages of each road as equally as possible among the different states of the Union.

2. The Southwestern National Railroad, from Washington City to New-Orleans, passing through the states of Virginia, Tennessee, Alabama, Mississippi, and Louisiana; constituting the shortest practicable line of mail and travel transit, and consisting of the following continuous sections now under construction, to wit: the Richmond and Lynchburg Railroad, the Virginia and Tennessee Road, the Georgia and Alabama Road, the Alabama and Tennessee River Road, the Selma and Jackson Road, the New-Orleans and Jackson Road.

3. *For Kentucky*.—The Memphis and Louisville Road, the Louisville and Nashville Road.

4. *For Tennessee*.—The Memphis and Louisville Road, the Memphis and Charleston Road, the Louisville and Nashville Road, the Nashville and Southwestern Road, and the roads embraced in the "National Route" above referred to.

5. *For Alabama*.—The Mobile and Ohio Road, and the roads embraced in the "National Route" referred to.

6. *For Georgia and Florida*.—The Gulf Road, or a continuation of the Southwestern Road of Georgia to Pensacola Bay; the Florida Peninsula Road.

7. *For Mississippi*.—The Mobile and Ohio Road; the New-Orleans Jackson and Nashville Road; the New-Orleans, Holly Springs, and Ohio Road; the Vicksburg and Jackson Road, extended by Brandon eastward to Selma.

8. *For Arkansas*.—The Arkansas and Mississippi River Road, from Fort Smith or Van Buren to Little Rock, and thence to White River, and there diverging to Memphis and Helena. A road from Fayetteville to Van Buren; and one from the Central Railroad, leaving the same near the St. Francis Ridge, through Jackson and Independence counties to southwestern Missouri. A road from Little Rock to the Louisiana line, to intersect with the New-Orleans and Opelousas Railroad. A road from northeastern Texas to Little Rock, crossing Red River at or near Fulton.

9. *For Louisiana*.—The New-Orleans, Algiers, Texas, and El Paso Road; the Madisonville and Jackson Road; the Vicksburg and Shreveport Road; the New-Orleans and Nashville Road.

10. *For Texas*.—A road from a point on the northeast part of the state, (connecting with the Little Rock and Fulton Road,) to run on the dividing ridge of the Sulphur and Red River to the ridge between Bois D'Arc and Sulphur; thence to Dallas, and to connect with the New-Orleans and El Paso Route. The continuation of the New-Orleans, Opelousas, and El Paso Road through Texas.

11. *For Missouri*.—The road from St. Louis westward; the Hannibal and St. Joseph Road.

The second section, being under consideration, was amended by proposing a route from Paducah, at the mouth of the Tennessee River, to the Tennessee State line, to intersect the road from New-Orleans and Mobile.

The following, offered by Mr. J. R. Anderson, of Virginia, was passed:

Resolved, That, as the sense of this Convention, a railway and water communication across the Isthmus of Tehuantepec is of national importance, and especially so to the whole southwest.

RAILROADS AND TRANSPORT, AT HOME AND ABROAD.—Soon after the revolution, New-York and Pennsylvania set about the construction of canals, and so important was the matter of internal communication regarded in Congress, that the Secretary of State, Mr. Gallatin, was requested, in 1817, to project a general system for the country. The Erie Canal was begun in 1817, and completed in 1825, for the connection of the Hudson with the lakes, at a cost of about twelve millions of dollars, or, including the enlargement in 1835, nearly twenty-five millions of dollars. The total length is 363 miles.

Mr. M. Chevalier, who published, not long since, a work upon the modes of transport in

the United States, estimates the length of all the canals at that time, 1843, 4,333, with 2,359 in projection, much of which has since been finished. The total cost, to the time of his estimate, was £27,870,964, or nearly \$180,000,000. The canals of the United States to those of Great Britain, compared by population, are in length as 9 to 4, and to those of France as 13 to 4.

The inland steam navigation of the country has also grown to be a subject of proud gratulation, and no nation in the world can at this time vie with us.

Dr. Lardner gives a list of the first-class steamers on the Hudson in 1838, and at the present time, which shows, on the single point of length, the following extraordinary improvement:

	Length, Breadth feet. Beam, ft.
De Witt Clinton.....	230.....28
Champlain.....	180.....27
Erie.....	180.....27
North America.....	200.....30
Independence.....	148.....26
Albany.....	212.....26
Swallow.....	233.....22
Rochester.....	200.....25
Utica.....	200.....21
Providence.....	180.....27
Isaac Newton.....	333.....40
Bay State.....	300.....39
Empire State.....	304.....39
Oregon.....	305.....35
Hendrick Hudson.....	320.....35
C. Vanderbilt.....	300.....35
Connecticut.....	300.....37
Commodore.....	280.....33
New World.....	376.....35
Alida.....	286.....28

"All the vessels more recently constructed are, accordingly, finished and decorated in the most luxuriant manner. No water communication in the world can compare with them. Nothing can exceed the splendor and luxury of the furniture. Silk velvet, and the most expensive carpeting, mirrors of immense size, gilding and carving are used profusely in their decoration. Even the engine room in some of them is lined with mirrors. In the Alida, for example, the end of the room containing the machinery is composed of one large mirror, in which the movements of the highly finished machinery are reflected."

On the Mississippi and other western waters, a class of boats, scarcely less splendid, have come into use, but worked upon principles entirely different, and with greatly reduced security to person and life. They are worked with high-pressure steam, without condensation, and to obtain the benefit derived from a vacuum in the low-pressure boats, the steam is worked at an extraordinary pressure, reaching, ordinarily, 150, and sometimes 200 pounds to the square inch. Accidents to these boats

are frequent, and occur in a variety of ways. When the boilers are constructed with returning flues, the space left is so small, the slightest variation in the quantity of water contained, or in the trim of the vessel, causes the upper flues to be uncovered, become red hot, and collapse with frightful force and loss of life. And this cause of explosion results from the great accumulation of mud from the rivers in the boiler. This cuts the action of the fire off from the water, and concentrates it all upon the iron, which, soon becoming red hot, softens and bursts. The remedy is in continually "blowing off," before the mud can accumulate in quantities to be dangerous.

In the better class of boats on the Mississippi river, however, there is a wiser and far more secure system of management of late adopted, and travellers may feel much more at their ease than in former times, since accidents upon these boats are growing very rare. It is a pity the example could not be more widely followed, and that if the interest of owners could not be a sufficient stimulant, some method of coercion has not been devised by government over the refractory. Hundreds of lives are lost every year by the sheerest negligence, or by the most criminal cupidity. There must be a remedy somewhere, and the calls of humanity demand its early enforcement.

In speaking of the Mississippi boats, Dr. Lardner says: "The magnitude and splendor of these boats is little, if at all inferior to those of the Hudson. They are, however, constructed more with a view to the accommodation of freight, as they carry down the river large quantities of cotton and other produce, as well as passengers, to the port of New-Orleans. Many of these vessels are three hundred feet and upwards in length, and are capable of carrying a thousand tons freight, and three or four hundred deck passengers, besides the cabin passengers. The traffic in goods and passengers of the entire extent of the valley of the Mississippi is carried by these vessels, except that portion which is floated down by the stream in a species of raft, called flat boats.

The following statistics, from another source, will show the rapid increase of steam navigation upon western waters:

In 1815 there were in use about 14 steam boats.	
In 1829	" " 200 "
In 1834	" " 230 "
In 1842	" " 450 "
In 1843	" " 600 "
In 1848	" " 1200 "

The number of steamboats running at the present time upon the western lakes and rivers is now reckoned at about 1,400. Their tonnage is over twice as much as the entire steamboat tonnage of Great Britain, and probably fully equal to the steamboat tonnage of

all other parts of the world. The total value annually afloat on all western waters, is estimated at about \$550,000,000.

The progress of railroads in our country has been a subject we have frequently discussed in the pages of the Review, and have furnished all the statistics and information it has been in our power to obtain. No one need be told that this branch of enterprise is but in its infancy among us, whatever its present stature and importance. The great west is an exhaustless field for future developments, though it is now able to show but little. We extract from the work of Dr. Lardner the following pages, which sketch in bold and clear colors the great lines of railway communication which connect the Atlantic states together, or reach backwards from them to the western valley. It is impossible to do justice to the subject in any less concise description:

"Of the total length of railways which overspread the territory of the Union, more than the half are constructed in the states of Pennsylvania, New-York, and those of New-England. The principal centres from which these lines of communication diverge are Boston, New-York and Philadelphia.

"A considerable extent, though of less importance, diverges from Baltimore; and recently lines of communication of great length have been constructed from Charleston in South Carolina, and from Savannah in Georgia.

"From Boston three trunk lines issue; the chief of which passes through the state of Massachusetts to Albany, on the Hudson. This line of railway is two hundred miles in length, and appears destined to carry a considerable traffic. Its ramifications southward, through the smaller states of New-England, are numerous, chiefly leading to the ports upon Long Island Sound, which communicate by steamboats with New-York. The first branch is carried from Worcester, in Massachusetts, to New-London on the Sound, where it meets a short steam ferry which communicates with Greenport, at the eastern extremity of Long Island, from which another railway, nearly 100 miles long, is carried to Brooklyn, which occupies the shore of that island immediately opposite New-York, and communicates with the latter city by a steam ferry.

"Thus there is a continued railway communication from Boston to New-York, interrupted only by two ferries.

"Another branch of the great Massachusetts line is carried south from Springfield through Hartford to New-Haven; and a third from Pittsfield to Bridgeport, both the latter places being on the Sound, and communicating with New-York by steamboats.

"The second trunk line from Boston proceeds southward to Providence, and thence to

Stonington, from which it communicates by a ferry with the Long Island railway. This trunk line throws off a branch from Foxburg to New-Bedford, where it communicates by ferries with the group of islands and promontories clustered round Cape Cod.

"A third trunk line proceeds from Boston through the state of Maine.

"Notwithstanding the speed and perfection of the steam navigation of the Hudson, a railway is now being constructed on the east side of that river to Albany, which will be opened in the course of 1850. The section terminating at New-York is already in operation.

"From Albany an extensive line of railway communication, 323 miles in length, is carried across the entire state of New-York to Buffalo, at the head of Lake Erie, with branches to some important places on the one side and on the other. This line forms the continuation of the western railway, carried from Boston to Albany, and, combined with this latter, completes the continuous railway communication from the harbor of Boston to that of Buffalo on Lake Erie, making an entire length of railway communication from Boston to Buffalo of 523 miles.

"The branches constructed from this trunk line are not numerous. There is one from Schenectady to Troy, on the Hudson, and another from Schenectady to Saratoga; another from Syracuse to Oswego, on Lake Ontario; and another from Buffalo to the Falls of Niagara, and from thence to Lockport.

"Not content with this fine line of communication to the western lakes, the commercial interests of New-York have projected, and in part constructed, a more direct route from New-York to Buffalo, independent of the Hudson.

"The disadvantage of this river as a sole means of communication is, that during a certain portion of the winter, all traffic upon it is suspended by frost. In this case, the line of railway communicating already from Bridgeport and New-Haven to Albany, has been resorted to by travellers. However, it may be regarded as certain, that the intermediate traffic of the state of New-York along the direct line of railway now in progress from that city to Buffalo, will very speedily be sufficient for the support of an independent line of railway.

"The immediate environs of New-York are served by several short railways, as is usual, indeed, in all great capitals where the railway system of transport prevails.

"The line connecting that city with Harlem is analogous in many respects to the Greenwich and Blackwall lines at London, and the Versailles and St. Germain lines at Paris. It is supported by a like description of traffic. The New-York line, however, has this peculiarity, that it is conducted through the streets of the capital upon their natural level, with-

out either cutting, tunnel, or embankment. The carriages, on entering the town, are drawn by horses, four horses being allowed to each coach; each coach carrying from sixty to eighty persons, and being constructed like the railway coaches in general in the United States.

"The rails along the streets are laid down in a manner similar to that which is customary at places where lines of railway in England cross turnpike roads on a level. The surface of the rail is flush with the pavement, and a cavity is left for the flange to sink in.

"Other short railways from New-York to Paterson, Morristown, and Somerville, require no particular note.

"The great line of railway already described, from Boston to New-York, is continued southward from that capital to Philadelphia. There are here two rival lines; one of which, commencing from Jersey City on the Hudson, opposite to the southern part of New-York, is carried to Bordentown, on the left bank of the Delaware, whence the traffic is carried by steamboats a few miles further to Philadelphia. The rival line commences from South Amboy in New-Jersey, to which the traffic is brought from New-York by steamers plying on the Raritan river, which separates New-Jersey from Staten Island. From Amboy the railway is continued to Camden, on the left bank of the Delaware, opposite Philadelphia.

"By far the greater part of the traffic between New-York and Philadelphia is carried by the former line.

"Philadelphia is the next great centre from which railways diverge. One line is carried westward through the state of Pennsylvania, passing through Reading, and terminating at Pottsville, in the midst of the great Pennsylvanian coal-field. There it connects with a network of small railways, serving the coal and iron mines of this locality. This line of railway is a descending line towards Philadelphia, and serves the purposes of the mining districts better than a level. The loaded trains descend usually with but little effort to the moving power, while the empty wagons are drawn back.

"The passenger traffic is chiefly between Reading and Philadelphia.

"Another line of railway is carried westward through the state of Pennsylvania, passing through Lancaster, Harrisburg, the seat of the legislature, Carlisle, and Chambersburg, where it approaches the Baltimore and Ohio railway. The length of this railway from Philadelphia to Chambersburg is 154 miles. The former, to Pottsville and Mount Carbon, is 108 miles, the section to Reading being 64.

"A great line of communication is established 400 miles in length, between Philadelphia and Pittsburg, on the left bank of

the Ohio, composed partly of railway and partly of canal. The section from Philadelphia to Columbia, 82 miles, is railway. The line is then continued by canal, for 172 miles, to Holidaysburg. It is then carried by railway 37 miles to Johnstown, from whence it is continued 104 miles further to Pittsburg by canal.

"The traffic on this mixed line of transport is conducted so as to avoid the expense and inconvenience of transhipment of goods and passengers at the successive points where the railways and canals unite. The merchandise is loaded, and the passengers accommodated in the boats adapted to the canals at the depot in Market street, Philadelphia. These boats, which are of considerable magnitude and length, are divided into segments, by partitions made transversely and at right angles to their length, so that each boat can be, as it were, broken into three or more pieces. These several pieces are placed each on two railway trucks adapted to the form of the bottom and keel of the boat. In this manner the boat is carried in pieces, with its load, along the railways. On arriving at the canal, the pieces are united so as to form a continuous boat, which being launched, the transport is continued on the water.

"On arriving again at the railway, the boat is once more resolved into its segments, which, as before, are transferred to the railway trucks, and transported to the next canal station by locomotive engines.

"Between the depot in Market street and the locomotive station, which is situated in the suburbs of Philadelphia, the segments of the boats are drawn by horses, on railways conducted through the streets. At the locomotive station the trucks are formed into a continuous train, and delivered over to the locomotive engine.

"As the body of the trucks rest upon a pivot, under which it is supported by the wheels, it is capable of revolving, and no difficulty is found in turning the shortest curves; and these enormous vehicles, with their contents of merchandise and passengers, are seen daily issuing from the gates of the depot in Market street, and turning without difficulty the corners at the entrance of each successive street.

"The southern line of railway communications is continued from Philadelphia to Baltimore, interrupted only by a steam ferry over the Susquehanna.

"The management of these steam ferries is deserving of notice. It is generally so arranged, that the time of crossing them corresponds with a meal of the passengers. A platform is constructed, level with the line of rails, and carried to the water's edge. Upon this platform rails are laid, on which the wagons which bear the passen-

gers' luggage, and other matters of light and rapid transport, are rolled directly upon the upper deck of the ferry-boat, the passengers meanwhile passing under a covered way to the lower deck.

"The whole operation is accomplished in five minutes. While the boat is crossing the spacious river, the passengers are supplied with their breakfast, dinner, lunch, or supper, as the case may be. On arriving at the opposite bank, the upper deck comes into contact with a like platform, bearing a railway upon which the luggage wagons are rolled. The passengers ascend by a covered way, and, resuming their places in the railway carriages, the train proceeds.

"Baltimore is the next centre of railway movement. One line issues northward to Harrisburg in Pennsylvania, where it unites with the Philadelphia and Chambersburg line. A great line of western railway is projected to be carried from Baltimore to the left bank of the Ohio, to some point near Wheeling. This line, however, is as yet finished only so far as Cumberland, 158 miles. This place is at the foot of the Alleghany range, which is crossed by the great national, an excellent Macadamized roadway, which continues the communication 126 miles further, to Wheeling, on the Ohio. The ascent is gradual, and constructed on good engineering principles.

"The railway, when completed, will cross this ascent by a series of inclined planes, all of which but one will be worked by locomotive engines. This will probably be worked by means of a stationary engine. Nothing, however, is done as yet toward the realization of this part of the project.

"Baltimore is connected with Washington, the seat of the federal legislature, by an excellent line of railway nearly forty miles in length. From this point the great southern line of communication is continued by steamboats on the Potomac to the left bank of that river near Fredericksburg, in Virginia, a distance of about fifty miles. Here the line of railway communication is resumed and continued through the state of Virginia, passing through Richmond and Petersburg, being continued southward to Halifax, on the frontiers of North Carolina.

"Another line of communication southward is formed by steamboats on the Ches-

apeake, which ply between Baltimore and Norfolk, from which place a line of railway is carried to the frontiers of North Carolina, near Halifax, running into the great artery just mentioned, at Weldon. From Halifax the Great Southern Railway is continued through North Carolina to Wilmington, a seaport near the southern limits of that state.

"Thus is completed so far a continuous line of railway communication running north and south through the Atlantic states, commencing at Portland in the state of Maine, passing successively through Boston, Providence, New-York, Philadelphia, Baltimore, Washington, and Richmond, and terminating at Wilmington, the total length of which is nearly 1,000 miles. From Wilmington the communication with Charleston is maintained by steamboats, which ply along the coast.

"Charleston, in South Carolina, and Savannah, in Georgia, are the points from which other great lines of railway communication issue westward. That which proceeds from Charleston is carried across South Carolina to Augusta, on the confines of Georgia, throwing off a branch northward to Columbia, the capital of the state.

"The length of the main line to Augusta is 184 miles.

"From Augusta the line of railway is continued westward through Georgia, passing through Madison and Decatur, to the left bank of the Tennessee river, throwing off a branch to Athens, the seat of the University.

"From Savannah the line of railway passes through Georgia and Macon, and unites with the former line at Decatur.

"These lines of railway communication are continued westward to the left bank of the Alabama river, on which the transport is continued by steamboats to Mobile, and thence to New-Orleans, and by another line to the Tennessee, by which the navigation is continued through the Mississippi valley to the left bank of its great tributary, the Ohio."

We conclude this hasty paper with some statistics, showing the comparative railroad economy of the different nations of the world.

TABLE, showing the Population, extent of Territory, and extent of Railway in operation and in progress, in the several countries of the World where Railways have been constructed.

COUNTRIES.	Population.	Extent of territory, sq. miles.	Population per square mile.	Extent of railway open miles.	Extent of railway in progress miles.	Cap. invested in railways open.	Cap. to be invested in railways in progress.
United Kingdom.....	37,019,538	121,056	223.0	5,000	4,500	100,000,000	100,000,000
Germanic states, including Denmark and Holland.....	45,753,640	268,548	170.0	4,542	800	56,775,000	10,000,000
United States.....	17,104,615	5,642,536	10.4	6,565	200	52,000,000	2,000,000
France.....	35,400,466	281,708	173.0	1,732	189	45,812,000	15,350,000
Belgium.....	4,335,319	11,256	282.0	457	200	8,000,000	3,600,000
Russia.....	54,092,300	1,892,478	28.6	200	470	3,000,000	7,500,000
Italy.....	47,696,338	314,774	152.0	170	470	3,000,000	8,300,000
Totals and averages.....	331,312,256	4,453,260	52.0	18,656	7,820	368,567,000	146,750,000

Comparison of the extent of Railways in operation, and the amount of Railway capital, with the Population and territorial extent of the countries which possess them.

COUNTRIES.	Length of Railway per million of population, miles.	Length of Railway per 1,000 square miles of Territory.	Amount of Railway capital per head of population.	Railway capital per square mile of Territory.	Share of each country in every 100 miles of railway open.	Share of each country in every £100 of capital expended.	Share of each country in every 100 miles of railway in progress.	Share of each country in every £100 of capital to be expended.
United Kingdom.....	185.00	41.3	7.400	1,652.00	26.80	54.10	57.50	68.16
Germanic states, including Denmark and Holland.....	99.60	16.9	1.240	212.00	34.34	15.27	10.20	6.82
United States.....	364.00	4.0	3.050	31.70	35.17	14.10	2.55	1.57
France.....	48.30	8.3	1.310	227.00	9.12	12.75	15.20	10.40
Belgium.....	105.20	40.5	1.850	705.00	2.45	2.16	2.55	2.45
Russia.....	3.70	0.10	0.055	1.59	1.07	6.81	6.00	5.13
Italy.....	3.57	0.54	0.063	9.00	0.91	6.81	6.00	5.57
Totals and averages.....	80.5	4.18	1.600	83.00	100.00	100.00	100.00	100.00

Thus in the proportion which length of railway bears to population we have—1. United States; 2. Great Britain; 3. Belgium; 4. Germany; 5. France.

In the proportion of length of railway to territory—1st Great Britain and 5th United States. In proportion of railway capital to population, the United States stands 2d;

and in relation to the capital expended upon railways, 3d. In regard to length of railways actually open, we have—1. United States; 2. Great Britain; 3. Germanic states; 4. France; 5. Belgium; 6. Russia; 7. Italy.

The following table is invaluable, for the means of comparison it affords:

Comparative view of the movement of the traffic on a portion of the Railways in operation in the United Kingdom, United States, Belgium, France, and Germany.

	United Kingdom.	United States.	Belgium.	France.	German States.
Year reported.....	1847	1847	1847	1848	1846
	miles.	miles.	miles.	miles.	miles.
Length of railway.....	3,036	1,160	853	1,090	2,304
Average cost of construction and stock, per mile.....	£ 40,000	£ 9,200*	£ 18,000	£ 26,800	£ 11,000
Per mile of railway, per day.....	£	£	£	£	£
Receipts.....	7.6	4.05	4.6	5.30	2.16
Expenses.....	3.0†	1.89	2.9	3.33	1.04
Profits.....	4.06†	2.16	1.7	1.97	1.12
Expenses per cent. of receipts.....	40.0†	46.8	63.0	63.0	48.3
Profits per cent. of capital.....	4.2†	8.6	8.44	2.68	3.72
	s. d.	s. d.	s. d.	s. d.	s. d.
Receipts per mile of train.....	7 0	7 5	5 0	7 6	—
Receipts per passengers booked.....	2 0	2 3	1 6	2 1.75	1 6.5
	miles.	miles.	miles.	miles.	miles.
Distance travelled per passenger....	15.75	18.2	22.6	24.9	19.6
	d.	d.	d.	d.	d.
Receipts per passenger per mile....	1.54	1.47	0.8	1.03	0.93
No. of passengers per train.....	50	54	75.3	61.4	—
Per cent. of passengers booked.....					
1st class.....	13.8	100	11.0	7.0	8.6
2d class.....	39.5	—	24.0	24.6	22.4
3d class.....	46.7	—	65.0	68.4	74.0

* The average cost of the American railways taken collectively, per mile, is only £8,129. Those to which the present report refers include among them the most expensive in the states.

† The estimated limit.

Receipts per ton of goods booked....	s. d. 8 2.2	s. d. 5 8.5	s. d. 5 2	s. d. —	s. d. 10.1
Distance carried per ton.....	miles. 22.5	miles. 38	miles. 43.8	miles. —	miles. 46.4
Receipts per ton per mile.....	d. 1.67	d. 1.8	d. 1.34	d. —	d. 2.6
No. of tons per train.....	—	54.5	32.2	—	—
Average speed of passenger train in miles per hour.....	—	—	—	—	—
Stoppages included.....	24.5	15.6*	18.10	21.2	20.0
Stoppages excluded.....	32.0	—	24.90	27.0	24.2

RAILWAY SYSTEM OF EUROPE.—

TRAFFIC OF BRITISH RAILWAYS; COST OF CONSTRUCTION AS COMPARED WITH OTHER NATIONS; RAILROADS ON THE CONTINENT OF EUROPE; RAILROAD TAXATION; SPEED; ACCIDENTS.—Our readers will now be anxious to know the nature and extent of the traffic possessed by these railways, and the pecuniary returns which it has yielded.†

Years.	No. of Passengers.	Receipts from Passengers.
1843.....	23,466,896	£3,110,257
1844.....	27,763,602	3,439,294
1845.....	33,791,253	3,976,341
1846.....	48,796,983	4,725,216
1847.....	51,352,163	5,149,002
1848.....	57,965,070	5,720,382

It appears from this table, that though the number of miles of railway opened in 1848 was more than double of that opened in 1843, and though the number of passengers had increased in a still greater proportion, yet the receipts were not nearly double, being only as 57 to 31, a result which must have arisen either from the passengers having travelled a shorter distance, or from their having travelled in carriages of a lower class, results arising doubtless from the state of the country.

In the table of the goods traffic the result is widely different:

Years.	Receipts from Goods.	Total receipts from Goods & Passengers.
1843.....	£1,424,932	£4,535,189
1844.....	1,635,380	5,074,674
1845.....	2,233,373	6,208,719
1846.....	2,846,353	7,565,569
1847.....	3,762,884	8,910,886
1848.....	4,213,169	9,933,551

This table is a most important one, as it proves that while the railway lines have been

little more than doubled, or have been increased in the ratio of 18.6 to 38.7, the receipts from goods have been increased *three times*, in the ratio of 14 to 42; so that the total receipts have increased at a greater ratio than the number of miles, viz. as 45 to 99.

In order to learn what classes of society contribute to the support of the railway system, and in what proportion, we shall take the year from 30th June, 1847, to 30th June, 1848, the number of miles that were open at the beginning of this period being 3,507, and the number open at the end of it, 4,357:

	Passengers.	Receipts.
First class.....	7,190,779	£1,792,533
Second class.....	21,690,509	2,353,153
Third class.....	15,241,529	661,038
Parliamentary class.....	13,092,489	902,851
Mixed.....	749,763	11,807
Total.....	57,965,069	£5,721,382
Receipts from goods, cattle, parcels, &c.....		4,213,179
Total receipts for the year 1847-8.....		£9,934,561

It appears from this table that the middle classes of society are the best contributors to railways; the number of that class who travel in second class carriages being *three times* greater than those who travel in first class carriages, and the receipts from that class being greater in the ratio of 18 to 24.

The same returns for the half year ending December, 31st, 1848, give a very favorable view of the progress of the system. The number of miles open at the beginning of that half year was 4,443, and the number open at the end of it, 5,079. These 5,079 are distributed as follows:

Railways in England.....	3,918
" in Scotland.....	728
" in Ireland.....	261

* By estimation.

† From the British Review, for August, 1849.

	Passengers.	Receipts.
First class.....	3,743,602	£1,003,516
Second class.....	12,191,549	1,360,468
Third class.....	7,184,082	320,862
Parliamentary class.	8,450,623	597,071
Mixed.....	60,485	1,382
Total.....	31,630,291	£3,283,299
Receipts from goods, cattle, parcels, &c.....		2,461,662
Total receipts for half year ending Dec. 31st, 1846...		£5,744,961

It is obvious from this table, compared with the preceding, that the second class passengers have increased in a greater ratio than the others.

Taking the average number of miles open, during the half year, at 4,756, the receipts for each mile would average £1,208. On the following principal lines this average differs greatly:

On the London and Northwestern. it is	£2,625
" Edinburgh and Glasgow...	1,853
" Great Western.....	1,705
" Lancashire and Yorkshire..	1,681
" Southeastern.....	1,675
" London, Brighton and South Coast.....	1,657
" Midland.....	1,385
" Southwestern.....	1,341
" Eastern Counties.....	1,298
" York, Newcastle and Ber- wick.....	1,170
" Caledonian.....	837
" York and North Midland..	723
" Eastern Union.....	700
" Great Southern and West- ern of Ireland.....	592

In their latest report the railway commissioners have endeavored to estimate the amount of money expended on the construction of railways:

"The returns, which will enable them to do this accurately, are being received by them, and will, on their completion, be laid before Parliament. They believe, however, that the expenditure in 1848 was less than that in 1847, but nearly as large as the expenditure in 1846; that at the end of 1848, rather more than £200,000,000 had been expended on railways; that the companies retained power to expend upon authorized railways £140,000,000, and that the extension of time which has been granted to so many companies will allow this expenditure to be distributed over five or six years. But it has already been stated, that it appears probable that a large proportion of the lines not now in progress will never be completed; and if it be assumed that at least one half of the lines which are not in progress will be entirely

abandoned, it may also be assumed that £80,000,000 of authorized capital will not be required."—*Report for 1848, Part ii, p. 7.*

Before concluding our general notice of the physical and commercial character of our railway system, we must notice the comparative expenses which have been incurred in England and in foreign countries. In favorable situations, English railways, with their double lines of rails, have been constructed for £10,000 per mile. When the localities have been very unfavorable, they have cost as much £50,000 per mile. Between these two extremes we have all varieties of expenditure per mile. Mr. Lecount has computed that a railway eighty miles long, which cost £960,000, or £12,000 per mile, which will rarely happen, would require the following traffic per day, from each end, to pay the annexed dividends:

Tons of goods per day.	Passengers per day.	Dividend.
75..... or.....	120.....	$\frac{1}{2}$ per cent.
100..... or.....	160.....	1 " "
125..... or.....	200.....	1 $\frac{1}{2}$ " "
200..... or.....	320.....	4 $\frac{1}{2}$ " "

Or, taking into account a traffic composed of both passengers and goods, the calculation would stand thus:

Tons of goods per day.	Passengers per day.	Dividend.
35..... and.....	60.....	$\frac{1}{2}$ per cent.
50..... and.....	80.....	1 " "
62..... and.....	100.....	1 $\frac{1}{2}$ " "
100..... and.....	160.....	4 $\frac{1}{2}$ " "

It seldom happens that, in this country, a mile of railway can be executed at so low a rate as £12,000 per mile.

The average expense of £5,081 per mile for American roads, employed by Mr. Lecount, agrees very nearly with the following statement mentioned by Mr. French, the member for Roscommon county, in the discussion on Irish railways, in the House of Commons, on the 9th of July:

	Per mile.
Columbia and Philadelphia.....	£10,000
Boston and Worcester.....	7,700
Western.....	7,300
Camden and Amboy.....	4,100
Utica.....	3,600
Richmond.....	3,600
Florida.....	3,200
Auburn.....	2,900
South Carolina.....	2,600
Average.....	£5,000

In Prussia, a comprehensive system of railways, to the extent of 8,300 miles, was planned by the government, with its usual wisdom and liberality; but, up to 1846, six hun-

dred and fifty-two miles only were completed, as shown in the following table—the political disturbances in 1848 and 1849 having doubtless prevented the execution of the general plan:

	Length in Miles.	Cost.
Berlin and Anhalt.....	98½	£726,878
Berlin and Potsdam.....	16	210,000
Berlin and Stettin.....	83	783,000
Berlin and Frankfurt on Oder	49½	420,000
Lower Silesian, }.....	134	1,200,000
Upper Silesian,* }.....	49½	630,000
Breslau and Schweidnitz...	37	285,000
Magdeburg and Leipzig....	67½	615,000
Magdeburg and Halberstadt	35½	286,155
Dusseldorf and Elberfeld....	16	304,170
Cologne and Aix-la-Chapelle.	52	1,425,000
Cologne and Bonn.....	18½	181,000
Total.....	652	£7,017,198

According to this table, the average cost of the Prussian lines is about £10,000 per mile.

The following table shows the length and cost of each of the lines formed in Austria:

	Length in Miles.	Cost.
Linz Gmunden Budweis....	119	£742,000
Emperor Ferdinand's line....	179	1,700,000
Vienna to Glognitz.....	46	1,050,000
Olmütz and Prague.....	151	1,858,725
Murzsuehl and Gratz....	57½	not given.
Total.....	495	£4,936,825

These lines show an average of about £11,300 per mile.

The small states of Germany have executed the following lines of railway, 541 miles in length, of which 371 miles belong to the government:

	Length in Miles.	Cost.
*Baden†.....	97	£1,704,036
*Brunswick and Hanover....	38	209,707
*Brunswick and Oscherleben.	43	240,000
*Brunswick and Harburg...	27½	127,500
Hamburg to Bergedorf.....	10½	191,332
Altona to Kiel.....	64	382,500
Leipzig to Dresden.....	71½	975,000
*Saxon Bavarian.....	51	900,000
Tannus Railway.....	28	291,661
*Munich to Augsburg.....	37	350,000
*Louis, Southern & Northern.	70	4,286,500
Nuremberg and Furth.....	4	17,708
Total.....	541	£9,676,249

* The government have guaranteed 3½ per cent. to the companies.

† The lines marked *, were executed at the expense of the government.

The average cost of these lines will be about £19,000 per mile.

After these details regarding foreign railways, our readers will scarcely give credit to the following statement regarding the expense per mile of English railways:

	Per Mile.
Blackwall Railway.....	£289,980
Croydon.....	80,400
Manchester and Bury.....	70,000
Manchester and Leeds.....	64,588
Manchester and Birmingham....	61,624
Brighton.....	56,981
Manchester and Sheffield.....	56,316
Eastern Counties.....	46,355
Great Western.....	46,870
Southeastern.....	44,412
Northwestern.....	41,612

Leaving out the Blackwall railway, which would make an average of the expense of the preceding lines ridiculous, the average expense of the remaining ones per mile is £56,915! Some idea of the cause of apparently such profligate expenditure may be formed from the following facts:

	Parliamentary Expenses of the	Per Mile.
Blackwall Railway.....	£14,414	
Eastern Counties.....	886	
Manchester and Birmingham....	5,190	
Brighton.....	4,806	

The following sums, per mile, were paid for land:

	Per Mile.
Manchester and Birmingham.....	£16,262
Eastern Counties.....	15,881
Brighton.....	10,105
Average per mile.....	14,083

So little is known in this country concerning foreign railways, that we were anxious to have supplied the defect by copious details respecting their history and statistics, and by comparing them with our own, in reference to the cost of their construction and maintenance, the accommodation of passengers, and their receipts and prospects; but though we have collected much information on the subject, our restricted space will not allow us to give it in detail. We shall therefore content ourselves with such an abstract of the more important particulars as our limits will permit. The following table contains a general view of the railway system in Germany:

Names of the States.	Eng. miles constructed.	Eng. miles in project.	Eng. miles to be constructed.	Eng. miles total.
Austria.....	716½	229	158½	1,103
Prussia.....	677½	408	794	1,874
Duchy of Anhalt.....	39½	12½	—	52
Kingdom of Saxony.....	176	148	7	331
Duchy of Saxe.....	187½	48½	87	144
Bavaria.....	149	308½	174½	632
Wurtemberg.....	24	148	32	204
Grand Duchy of Baden.....	154½	35½	—	195
" Hesse Darmstadt.....	34½	48½	40	118
Duchy of Nassau.....	27	—	—	27
Frankfort-on-Main.....	2	14	—	16
Electorate of Hesse.....	"	178	4	182
Duchy of Brunswick.....	73	—	7	80
Hanover.....	59	154	161	374
Hanseatic Towns.....	9	—	2½	11½
Grand Duchy of Mecklenburg.....	46	—	94½	140½
Holstein and Lauenberg.....	96	81	43½	170½
Total.....	2,294	1,748½	1,595	5,637

The total number of lines thus projected in all Germany is not much greater than the number now executed in England.

We have now before us a very interesting table of French railways in 1847, with the

minutest details, occupying thirteen separate columns, and showing the expense of all the different varieties of work necessary for their completion. We must confine ourselves however, to a brief abstract.*

Names of the Lines.	Length in kilometres actually constructed.	Total expense.	Expense per Eng. mile.
† St. Etienne to Anvrezieux.....	21.25	f. 2,996,503	f. 144,296
" to Lyons.....	56.69	21,182,873	373,648
Branch to Montand.....	"	399,549	"
† Anvrezieux to Roanne.....	67.00	12,500,000	186,587
† The Garde Line, Nismes, &c.....	92.32	18,914,368	204,876
Paris to St. Germain.....	18.47	16,413,139	888,830
Atmospherical Branch.....	2.00	4,689,835	"
† Anzin to Denain and Abbecon.....	15.56	2,818,202	181,083
† Montpellier to Cette.....	27.35	4,509,134	164,865
Paris to Versailles.....	19.50	17,055,722	874,652
" ".....	16.89	16,855,301	998,005
† Bordeaux to La Teste.....	52.31	5,987,773	114,471
† Alsace, { Mulhous to.....	15.00	2,869,096	191,273
{ Strasburg to Basle.....	140.50	44,953,618	319,953
Paris, { Orleans, {.....	132.69	59,652,779	449,531
{ Corbeil, {.....			
Paris to Rouen.....	131.31	64,589,384	494,169
Rouen to Havre.....	91.00	56,560,316	631,542
Montpellier to Nismes.....	52.00	16,519,605	317,685
† Paris to Sceaux.....	10.45	4,740,120	453,754
The Northern Line.....	334.90	135,476,337	404,528

The following lines have been opened in France between 1847 and August, 1849:

	Kilom.
Paris to Tronnerre.....	185
Paris to Troyes.....	182
Orleans to Saumur.....	171
Orleans to Bourges.....	112
Amiens to Boulogne.....	124
Marseilles to Avignon.....	123
Rouen to Dieppe.....	70
Vierzon to Chateauroux.....	63

* The lines marked † are only single lines.

Making about 1,360 English miles in all France.

The lines in Belgium, constructed by the state, amount to 347 miles, and cost £5,945,148. They unite Brussels with Ostend, Bruges, Ghent, Antwerp, Malines, Courtray, Lille, Tournay, Douay, Valenciennes, Mons, Charleroi, Namur, Marienbourg, Liege and Aix-la-Chapelle.

In Holland there are railways joining Amsterdam with Rotterdam, fifty miles; and with Utrecht and Arnheim, sixty miles.

In the north of Italy a line partly finished passes from Venice to Turin and Alessandria,

by Vicenza, Verona, Brescia, Milan and Novara, and one from Milan to Monza. There is also a line from Florence to Leghorn, through Pisa, and to Pontedera; another from Pisa to Lucca and St. Salvatore, and another from Florence to Prato.

In the south of Italy there is a railway from Naples to Pompeii and Castellamare, and another from Naples to Caserta and Capua; but no line has been projected in the States of the Church. The Pope, indeed, is said to have objected to their introduction.

There is a railway in Switzerland, twenty-five English miles in length, from Zurich to Dietikon and Baden; and, even in Spain, a railway seventeen and three-quarter English miles in length has been recently opened from Barcelona to Mataro.

The most eastern railways in Europe terminate at Warsaw and Cracow. A line is in progress to Bochnia, east of Cracow, and another from Peath to Debrezsin, still further east.

The Swedish government have exhibited great practical wisdom in the encouragement they have given in the formation of railways. The state guarantees to the projectors four per cent. for fifteen years; and the pecuniary loans given by government are not to be repaid till after ten years, and then they are only to be exacted from one half of the surplus profits above six per cent. If the state resolves to purchase the lines, they cannot do so till after twenty years, and they must then pay a bonus of twenty-five per cent. In place of a tax being exacted by the state as

in British railways, and exorbitant local rates, the government gives, for nothing, the portions of the crown lands through which the lines may pass, and also the labor of soldiers, paupers and convicts, at reduced wages. The government has also agreed to erect electric telegraphs at their own expense.

The liberal conduct of the Swedish and other governments to railway enterprise, forms a singular contrast with that of Great Britain. When the early railway companies were receiving large dividends, it was not to be wondered at that government, in its necessities, should impose some tax upon their exorbitant profits, and that the parochial authorities should imitate their example. In the present state of railway property, however, these burdens are intolerable, and cannot, with any propriety, be much longer imposed. The London and Northwestern Company have paid, during the last year, the sum of £50,505 for government duty, and £58,650 for local rates and taxes. In the half year just ended, the London and Southwestern Company have paid for local rates alone, £10,833, which is *upward of eleven per cent. on their balance available for a dividend!* This tax, consisting chiefly of poor's rate, is so unjust and oppressive, that Parliament ought instantly to redress the grievance. In this last case, every adult employed by the company is taxed £12 10s. per annum, while the average impost on the male population of the country is only 30s. per head.

The following table shows the taxes imposed upon railways for the year 1848:

	Government Duty.	Rates and Taxes.
London and Northwestern,.....	£50,505 8 0	£58,649 15 10
Great Western,.....	29,608 18 8	38,555 5 2
Midland,.....	23,043 10 5	33,125 13 2
Eastern Counties,.....	18,817 5 1	24,754 3 8
London, Brighton, and South Coast,.....	16,376 5 0	22,834 3 5
London and Southwestern,.....	15,033 5 0	19,491 9 6
Northeastern,.....	14,895 9 1	24,367 18 10
York and North Midland,.....	7,092 14 1	13,960 18 2
York, Newcastle and Berwick,.....	6,571 9 3	14,513 17 1
Lancashire and Yorkshire,.....	4,336 10 4	16,793 10 2
London and Blackwall,.....	2,363 11 6	2,209 13 7
South Devon,.....	2,134 6 5	2,017 1 10
East Lancashire,.....	1,906 18 1	2,695 14 1
Birkenhead, Lancashire and Cheshire,.....	1,602 15 3	457 12 10
Manchester, Sheffield, and Lincolnshire,.....	1,172 19 8	3,423 0 5

Railways have not made much progress in our colonies and dependencies. They have been checked by the same causes which operated in every part of Europe. The East India Company have guaranteed to the Great Indian Peninsular Company a dividend of five per cent. upon £500,000, a sum which is supposed capable of completing the first thirty-five miles of the line, from Bombay to Callian; and the 11th and 12th Victoria, cap. 13, guarantees four per cent. for loans for the construc-

tion of railways in the West Indies and Mauritius. A number of railway acts, passed by the legislatures of the colonies of British Guiana, Trinidad, Jamaica, Ceylon, New-Brunswick and Canada, have been reported upon by the railway commissioners to the Colonial Office. Colonial acts have also been passed, in 1847 and 1848, for incorporating the Nova Scotia Electrical Telegraph Company, and the British North American Electro-Magnetic Telegraph Association.

The greatest RAILWAY SPEED that has yet been accomplished, was displayed by the *Courier*, in travelling from Didcot to Paddington, on the 26th August, 1848, with the twelve o'clock express train from Exeter. This engine is one of the eight wheel class, with eight feet driving wheels, a cylinder of eighteen inches, and a stroke of twenty-four feet. From a state of rest at Didcot to the time when the train entered the station at Paddington, only forty-nine minutes and thirteen seconds elapsed; that is, at the average rate of *sixty-seven miles* an hour, including the time lost in getting up speed when leaving Didcot, and in reducing speed when approaching Paddington. Exclusive, however, of these losses, exactly, in travelling from the forty-seventh mile-post, which the train passed at 3^h 46' 40¹/₂" to the fourth mile post, which it reached at 4^h 23' 26¹/₂", *forty-three miles were performed in thirty-six minutes and forty seconds*, or an average speed accomplished of *upward of seventy miles per hour!* While the train is thus almost on the wing, beating the eagle in its flight, the passengers are reclining in their easy chairs, thinking or sleeping, reading or writing, as if they were in their own happy homes—safer, indeed, than there, for thieves cannot rob them by day, nor burglars alarm them by night. The steam-horse starts neither at the roar of the thunderstorm nor the flash of its fire. Draughts of a purer air expel the marsh poison from its seat before it has begun its work of death; and, surrounded by conductors, the delicate and timid traveller looks without dismay on the forked messengers of destruction, twisting the spire or rending the oak, or raging above the fear-stricken dwellings of man.

In a former article we had occasion to mention the *increasing* safety of steam navigation, as exhibited in the voyages of steamers connected with the state of New-York. In the five years ending with 1824, *one* life was lost out of every 126,211 passengers; in the same period, ending with 1833, *one* life was lost in every 151,931 passengers; and in the same period, ending with 1838, *only one* life was lost out of 1,985,787, the safety of the passengers having increased sixteen and one half times. The same result has been obtained in railway travelling. According to the calculations of Baron von Reden, the following were the casualties which took place on the railways of England, France, Belgium and Germany, between the 1st of August, 1840, and July, 1846:

Killed by his own Negligence.

England,	1 passenger out of	869,000 passengers.
France,	1 " "	2,187,000 "
Belgium,	1 " "	670,000 "
Germany,	1 " "	23,000,000 "

Killed and Wounded from Misconduct.

England,	1 official out of	300,000 officials.
France,	1 " "	5,000,000 "
Belgium,	1 " "	280,000 "
Germany,	1 " "	9,000,000 "

Killed from Defective Management.

England,	1 person out of	882,000
France,	1 " "	3,465,996
Belgium,	1 " "	1,600,764
Germany,	1 " "	12,354,858

The safety of railway travelling in Germany, as shown in the above table, is very remarkable, and to us inexplicable; nor is the great loss of life on English railways less unaccountable; for it is four and one quarter times greater than in France, two times greater than in Belgium, for passengers, and nearly fifteen times greater than in Germany. If these results are correct, they inspire us at least with the hope that all nations may now rival the Germans in the safety with which they conduct their railway operations. That railway travelling in England is approaching rapidly to that in Germany, in respect to the safety of travellers, we shall be able to show from documents that cannot be questioned. We have now before us the returns to Parliament of all the accidents which have taken place on the railways of Great Britain and Ireland for the years 1847 and 1848, and from them we obtain the following important results:

In 1847.

19 passengers killed, and	87 injured, from causes beyond their control.
8 " "	3 injured, owing to their own misconduct or inattention.
17 servants killed,	26 servants injured, from causes beyond their control.
107 " "	43 injured, owing to want of caution.
55 trespassers killed,	12 injured.
1 person killed,	1 injured, by crossing or standing on the line.
1 suicide,	—
211 killed.	174 injured.

The number of passengers during 1847 was 54,854,019.

In 1848.

9 passengers killed, and	128 injured, from causes beyond their own control.
12 " "	7 injured, owing to their own misconduct or inattention.
13 servants killed,	22 injured, from causes beyond their own control.
125 " "	42 injured, from misconduct or inattention.
41 trespassers killed,	10 injured, from crossing or standing on line.
—	—
202 killed.	219 injured.

The number of passengers during 1848 was 57,835,132.

If we now take the number of passengers killed from causes beyond their own control, we shall obtain the following results:

Passengers killed.	
1847,	19, or 1 out of 2,887,053 passengers
1848,	9, or 1 out of 6,438,348 "

Hence the risk of being killed was nearly two and one half times less in 1848 than in 1847, and nearly eight times less than it was in the years 1846 and 1845, according to Baron von Reden's calculations. The comparatively great loss of life to passengers in 1847 was occasioned by the accident at Wolverton, on the 6th of November, when seven passengers were killed by the passenger trains running into a sliding, and coming into collision with a coal train, in consequence of the negligence of the policeman; and also to the death of three passengers on the 24th of May, by the fall of part of the railway bridge over the river Dea, when part of the train was precipitated into the water. Such disasters will, in all probability, never again occur. They have, at least, not occurred in 1848 and 1849; and we can therefore say to our timid and over-sensitive friends, who refuse to travel on railways, that in the year 1848 only one passenger was killed out of six and a half millions of passengers who travelled by railway; and that no safer travelling than this is to be found, or can be conceived.

RAILROADS IN THE UNITED STATES.—The superintendent of the census, J. C. G. Kennedy, Esq., having, at the request of the French Department of Public Works, and at very considerable labor, prepared the subjoined able and comprehensive statistical view of the extent of American railroads, as well those in course of construction as those contemplated and in operation, he has kindly permitted us to take a copy of it for publication:

CENSUS OFFICE,

Washington, March 1, 1852.

In compliance with your request, I proceed to answer your inquiries concerning railroads in the United States.

The number of miles of railroads in operation in the United States, January 1st, 1852, was, as nearly as can be ascertained, 10,814½. At the same time there was in course of construction an extent of railroad amounting, according to the most reliable estimates, to 10,898½ miles. By far the greater portion of the lines commenced, but now incomplete, will be finished within the ensuing five years. The length of railroad brought into operation since January 1, 1848, is 5,224 miles. Within the last year, 2,153 miles have been finished. Nearly all the lines in progress have been commenced since 1848. It is supposed that from one thousand to fifteen hundred miles,

additional to the 10,898 now known to be in progress, will be put under contract during 1852.

There never existed greater activity in the making of railroads in the United States than at the present time. Many of the lines projected have taken the place of plans for the construction of canals and turnpike roads. Accordingly, these works of public improvement are not prosecuted with the same ardor and energy as formerly, although much activity exists in the construction of plank-roads. The labor and capital which they would require are absorbed in the numerous and almost colossal railroads building. Since 1848, the extent of railroad opened for travel and transportation has nearly doubled, and there is reason to believe that the increase in the length of road brought into use will not be less rapid during the next period of four years. By the year 1860, we may expect that the territory of the United States will be traversed by at least 30,000 miles of railroad.

It is very difficult to form an estimate of the average expense per mile of building railroads in the United States. In fact, no average can be assumed as applicable to the whole country. The cost of the roads in New-England is about \$45,000 per mile; in New-York, Pennsylvania and Maryland, about \$40,000. But in the interior of these states the surface of the country is broken, rendering the cost of grading very heavy; and nearer the sea, wide and deep streams interrupt the lines of travel, and make the expense of bridging a serious item.

In New-England, and the more densely inhabited parts of the old states, from the Atlantic, as in all European countries, the extinguishment of private titles to the real estate required for railroads frequently forms a large part of the expenses included in the item of construction. In the southern states, and the valley of the Mississippi, \$20,000 per mile is considered a safe estimate. There, in most cases, all the lands necessary for the purposes of the companies are given to them in consideration of the advantages which private proprietors expect from the location of the roads in the vicinity of their estates.

In many of the western states, the cost of grading a long line of road does not exceed \$1,000 per mile, the cost of the timber amounting to nothing more than the expense of clearing it from the tract. For these reasons the expense of building railroads in the southern and western states is now much less than it will be when the country becomes as densely settled as the older states of the Union.

The Central Railroad of Illinois is an enterprise which furnishes a remarkable example of the energy and spirit of improvement in the new states. Illinois was admitted into the confederation as a state in 1818, with 80,000 inhabitants. It has 55,405 square miles of

territory, and a population, according to the census of 1850, of 851,470. The Central Railroad is to extend from its southwestern extremity, at the confluence of the Mississippi and Ohio rivers, to the north line of the state, with two diverging branches. The total length of this road, including the main stem and branches, is to be six hundred and eighty miles. The cost is estimated at \$20,000 per mile, or \$10,000,000 for the entire work, without equipments for operating it. This is the longest continuous line of road now in contemplation in the United States, of which there is any probability of speedy completion. It has been commenced with such facilities for executing the plans of its projectors, that there is no reasonable doubt that it will be finished within a few years.

Mr. Asa Whitney proposes to construct a railroad from St. Louis, or some other place on the Mississippi river, to the Pacific ocean, terminating either at San Francisco, in California, or at the mouth of the Columbia river, in Oregon. He solicits the patronage of the national government for this prodigious work, and petitions for the grant of land equal in extent to sixty miles in width to two thousand miles in length. His plans were first laid before Congress in 1842, and he has since been continually occupied in recommending them to the favorable attention of the government and the people with great ability and zeal; but with what success remains yet to be seen. Without expressing any view with reference thereto, it may be said that his project is generally considered impracticable, from the fact that of the two thousand miles of territory which his route across the country must traverse, a large portion consists of desert or of sterile and very elevated mountain districts, in which can be found no materials of construction, and which would afford no business for the support of the road, were the difficulties of building it overcome. Many intelligent men, however, are convinced of its practicability and expediency.

The railroad system of the United States may be considered to have commenced in 1830. The first one put in operation was a short road, built for transportation of ice from a small lake to the sea, in the state of Massachusetts. The length of this work was four miles. It was finished in 1830. In the same year the state of South Carolina caused to be commenced a railroad from Charleston, its principal port, to Augusta, in Georgia. The distance is 135 miles. The work was finished in 1833, at the very remarkably small cost of \$1,335,615, which sum included also the expenses of furnishing the road with engines and passenger and freight cars, and all other necessary equipments. This was the first road of any considerable length constructed in the United States, and it is believed to have been the cheapest and one of the most successful.

The longest continuous line of railroad in the world, and that in the construction of which the greatest natural obstacles have been overcome, is that which extends from the Hudson river, through the southern counties of New-York, to Lake Erie. Its length is four hundred and sixty-nine miles, and it has branches of an aggregate additional length of sixty-eight miles. Nearly its whole course is through a region of mountains. The bridges by which it is carried over the Delaware and Susquehanna rivers and other streams, and the viaducts upon which it crosses the valleys that intercept its route, are among the noblest monuments of power and skill to be found in our country. The most of these works are of heavy masonry, but one of them is a wooden bridge, one hundred and eighty-four feet in height, and having but one arch, the span of which is two hundred and seventy-five feet. One of the viaducts is 1,200 feet long, and 110 feet high. The aggregate cost of this important work was \$23,580,000, and the expense of construction was \$43,393 per mile. The road was originally suggested in 1829; a company was organized in 1832; surveys were made in the same year, and operations were begun by grading a part of the route in 1833. It was finished in May, 1851, and opened with great ceremony for travel and transportation in that month. The state advanced six millions of dollars towards the work, and afterwards released the company from the obligation to pay the loan. It will thus be seen that the execution of this great improvement was pursued through nineteen years, and it was not accomplished without calling into requisition both the resources of the state and the means of her citizens.

In the infancy of the American railroad system, and for ten years thereafter, it was the rule to extend to every important enterprise of that character the assistance of the state in which it was to be built.

Pennsylvania, Michigan, Illinois, Mississippi, and some other states, adopted extensive systems of improvements, consisting of railroads and canals, which they pursued until their credit failed; an event which happened in most cases before any of the works had been completed and brought into profitable use. But the general practice was to charter companies, each of which was charged with the execution of some particular work, and to aid them by loans of state stocks. Although this practice has fallen into so much disfavor in some of the states that the citizens have incorporated in their constitutions articles prohibiting advances by their legislatures for such purposes, it is yet continued by others, and Virginia, Tennessee, and other states are now prosecuting expensive works, considered essential to their prosperity, by means of advances from their respective treasuries.

In the year 1850, Congress passed an act,

after a very protracted discussion, granting to the state of Illinois about 2,700,000 acres of public lands to aid in the construction of the Central Railroad, to which allusion has been before made. This magnificent donation is reckoned by the company to which Illinois has confided the building of the road, to be worth \$18,000,000. This was the first instance in which the aid of the national government had been extended to a railroad project.

But since the above grant, innumerable ap-

plications have been made from all the new states for cessions of land for railroad purposes. Whether such further aid shall be extended, is now a much agitated question in American politics. Bills are pending in Congress, proposing to cede for these purposes about 20,000,000 acres.

The following table presents, in a convenient form, some of the principal facts connected with railroads in the United States on the 1st of January, 1852:

States with Railroads in operation or in process of construction.	Miles of Railroad completed and in operation.	Miles of Railroad in course of construction.	Area of the States in square miles.	Population in 1850.	No. inhabitants to the square mile.
Maine.....	315	127	30,000	588,188	19.44
New-Hampshire.....	489	47	9,280	317,964	34.26
Vermont.....	380	59	10,812	314,120	30.76
Massachusetts.....	1,089	67	7,800	994,499	127.49
Rhode Island.....	50	32	1,306	147,544	112.97
Connecticut.....	547	261	4,674	370,791	79.33
New-York.....	1,826	745	46,000	3,097,294	67.83
New-Jersey.....	226	111	8,320	489,555	58.84
Pennsylvania.....	1,146	774	46,000	2,311,786	50.25
Delaware.....	16	11	2,120	91,535	43.17
Maryland.....	376	125	9,356	583,035	62.31
Virginia.....	478	818	61,352	1,421,661	23.17
North Carolina.....	249	385	45,000	868,903	19.80
South Carolina.....	340	298	24,500	668,507	27.23
Georgia.....	754	129	58,000	905,999	15.62
Alabama.....	121	190	50,722	771,671	15.21
Mississippi.....	98	273	47,156	606,555	12.86
Louisiana.....	63	—	46,431	517,739	11.15
Texas.....	—	32	237,321	212,592	.89
Tennessee.....	112	748	45,600	1,002,625	21.93
Kentucky.....	98	414	37,680	982,405	26.07
Ohio.....	828	1,392	39,964	1,980,408	49.55
Michigan.....	427	—	56,243	397,654	7.07
Indiana.....	600	915	33,809	983,416	29.23
Illinois.....	176	1,409	55,405	851,470	15.36
Missouri.....	—	515	67,380	682,043	10.12
Wisconsin.....	20	421	53,924	305,191	5.65
	10,814	10,898			

Nearly parallel to the Atlantic coast of the United States, from Maine to Alabama, runs the range of mountains known as the Alleghany or Appalachian chain. The eastern bases of these mountains are not distant from the seaboard more than a hundred miles, and they form a very formidable obstacle to the construction of railroads between the great eastern cities and the interior. In nearly all the great enterprises which have been undertaken with the view to effect such connection, great additional expense has been incurred to overcome or to penetrate this mountain barrier. In the plan first adopted for the general system of state improvements in Pennsylvania, it was proposed to effect the crossing of the

Alleghanies by means of inclined planes, with powerful stationary engines at their summits. The planes were built, and have been used for several years, until experience proved their operation was too slow and too expensive to maintain a successful competition with other methods of conveyance, and other improvements have since been furnished designed to supersede them. The railroad from Baltimore to the Ohio river is carried over a passage in these mountains where the elevation is upwards of three thousand feet, and a part of that height is overcome by tunnels, varying in length from one sixteenth to four fifths of a mile. The road from New-York to Albany, along the banks of the Hudson, has three tun-

mala. The greatest work of this kind yet proposed in the United States is the tunnel through the Hoosick mountain, which, if executed, will be four miles in length, and fifteen hundred feet below the summit of the ascent. The cost is estimated at \$2,000,000. On the road from New-York to Lake Erie, tunnels have been avoided by expensive works, which overcome ascents of 1,400 feet.

No authentic statement has ever been given of the capital invested in the railroads of the United States, but we have the means of forming an estimate upon which much reliance may be placed. The railroads in operation at the beginning of the present year may be assumed to have cost \$348,000,000. The amount invested in the lines under construction, it is impossible to estimate, with even an approximation to correctness. Their cost, when completed, will be considerably less than that of an equal length of road now in operation; for the reason that the greater number of new or unfinished lines are in the west or south, where, as has been shown, the cost of construction is far below what it is in the northern and eastern states.

The management of the American railroads is entirely distinct from the administration of government. Their concerns are managed by corporations, which consist of a president, secretary, and directors. Each of the directors must own a certain amount of stock. They are chosen by the body of stockholders, who have votes in proportion to the number of shares they hold. The directors choose one of their body president, and appoint the secretary. The president and secretary have generally liberal salaries, but the services of the directors are gratuitous.

The rate of the speed on our railroads is not so great as on those of England. The ordinary velocity of a passenger train is twenty miles an hour, but on some routes it is as high as twenty-eight and thirty miles. Express trains, on such occasions as the conveyance of the President's message, frequently maintain for a long distance as high a speed as forty-five miles an hour. And on one road, that between New-York and Albany, forty-five miles per hour is the regular rate for all passenger trains.

The fares or rates of passage are not uniform. In New-England, the average price per mile for the conveyance of passengers is under two cents; from New-York to Boston, it is two and four tenths; from New-York to Philadelphia, three and four tenths; from Philadelphia to Baltimore, three and one tenth. From New-York to Cincinnati the distance is 857 miles by the northern route, of which 148 miles is travelled by steamboat. The price of passage for the whole distance is \$15 50, being slightly under two cents per mile. The lines between Baltimore and Cincinnati, soon to be opened, will be 650 miles

in length, and the fare will be \$13; that is, two cents per mile.

Believing that the history of the origin, condition, and extent of the railroads in the United States form one of the most important subjects of statistical investigation, and one not generally understood, I have devoted a portion of my time to the preparation of a complete history and detailed statement respecting each of the railroads in the United States, to accompany the other statistics to be embraced within the seventh census; but, as Congress may exercise their right of abridging the work on this and other subjects, it is impossible, in advance, to say what the census, when published, will contain. I inclose to you herewith a copy of the census of Maryland, prepared in advance, for reasons which will appear in its "preface."

RAILROADS IN THE UNITED STATES ON THE 1st JANUARY, 1852.*

NAMES OF RAILWAYS.	Miles in operation	Miles in construction
MAINE.		
Androscoggin.....	..	36
Androscoggin and Kennebec.....	55	..
Atlantic and St. Lawrence.....	91	68
Bangor and Piscataquis.....	12	..
Buckfield Branch.....	10	..
Calais and Bangor.....	6	..
Franklin.....	9	..
Portland and Kennebec.....	36	38
Portland, Saco and Portsmouth... ..	52	..
York and Cumberland.....	12	41
NEW-HAMPSHIRE.		
Ashuelot.....	24	..
Boston, Concord and Montreal... ..	76	17
Cheshire.....	54	..
Cochecho.....	18	..
Concord.....	35	..
Concord and Claremont.....	26	24
Contocook Valley.....	14	..
Great Falls.....	3	..
Great Falls and Conway.....	13	..
Manchester and Lawrence.....	26	..
New-Hampshire Central.....	26	..
Northern.....	82	..
Portsmouth and Concord.....	23	17
Sullivan.....	25	..
Wilton.....	18	..
White Mountain.....	..	18
VERMONT.		
Bennington Branch.....	..	6
Connecticut and Passumpsic.....	61	53
Rutland and Burlington.....	119	..
Rutland and Washington.....	12	..
Troy and Rutland.....	..	55
Vermont and Canada.....	38	..

* Western Journal.

Vermont Central	115	..	Norwich and Worcester.....	66	..
Vermont Valley.....	24	..	Collinsville.....	11	..
Western Vermont.....	..	58	Stonington and New-London.....	..	10

MASSACHUSETTS.

Berkshire.....	21	..
Boston and Lowell.....	28	..
Boston and Maine.....	38	..
Boston and Providence.....	53	..
Boston and Worcester.....	69	..
Cape Cod Branch.....	29	..
Connecticut River.....	52	..
Dorchester and Milton.....	3	..
*Eastern.....	75	..
Essex.....	21	..
Fall River.....	42	..
Fitchburg.....	69	..
Fitchburg and Worcester.....	14	..
Grand Junction.....	7	..
Harvard Branch.....	1	..
Lexington and West Cambridge..	7	..
Lowell and Lawrence.....	12	..
Nashua and Lowell.....	15	..
New-Bedford and Taunton.....	21	..
Newburyport.....	15	..
Norfolk County.....	26	..
Old Colony.....	45	..
Peterboro' and Shirley.....	14	..
Pittsfield and North Adams.....	18	..
Providence and Worcester.....	43	..
Salem and Lowell.....	17	..
South Reading Branch.....	8	..
South Shore.....	11	..
Stockbridge and Pittsfield.....	22	..
Stony Brook.....	13	..
Stoughton Branch.....	4	..
Taunton Branch.....	12	..
Troy and Greenfield.....	..	67
Vermont and Massachusetts.....	77	..
†Western.....	157	..
West Stockbridge.....	8	..
Worcester and Nashua.....	46	..

RHODE ISLAND.

Providence and Stonington.....	50	..
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CONNECTICUT.

Hartford and New-Haven.....	62	..
Hartford, Providence and Fishkill	51	..
Housatonic.....	110	..
Housatonic Branch.....	11	..
Middletown Branch.....	10	..
Naugatuck.....	62	..
New-Haven and Northampton...	45	..
New-London, Willimantic and Pal-	..	..
mer.....	66	..
New-London and New-Haven...	..	55
New-York and New-Haven.....	76	..

NEW-YORK.

Albany and Schenectady.....	17	..
Albany and West Stockbridge...	384	..
Attica and Buffalo.....	324	..
Buffalo and Niagara Falls.....	22	..
Cayuga and Susquehanna.....	33	..
Chemung.....	174	..
Hudson and Berkshire.....	314	..
Hudson River.....	144	..
Lewiston.....	8	..
Long Island.....	98	..
New-York and Erie.....	464	..
New-York and Harlem.....	130	..
Northern.....	118	..
Oswego and Syracuse.....	35	..
Rensselaer and Saratoga.....	32	..
Rochester and Syracuse.....	104	..
Saratoga and Washington.....	394	..
Saratoga and Schenectady.....	22	..
Schenectady and Troy.....	204	..
Skaneateles and Jordan.....	5	..
Syracuse and Utica.....	53	..
Tioga.....	15	..
Tonawanda.....	434	..
Troy and Greenbush.....	6	..
Utica and Schenectady.....	78	..
Watertown and Rome.....	97	..
Albany and Northern.....	..	33
Albany and Susquehanna.....	..	180
Buffalo and State Line.....	26	41
Buffalo and New-York.....	..	58
Buffalo and Cohocton Valley...	..	180
Canandaigua and Corning.....	46	..
Plattsburg and Montreal.....	..	25
Rochester and Niagara Falls...	..	74
Rutland and Washington.....	28	..
Sackett's Harbor and Ellisburg...	..	17
Troy and Boston.....	..	39
Troy and Rutland.....	15	..
Canandaigua and Niagara Falls..	..	92
Syracuse and Binghamton.....	..	70
Sodus Bay and Southern.....	..	35
Whitehall and Rutland.....	13	..

NEW-JERSEY.

Belvidere and Delaware.....	15	40
Burlington and Mount Holly....	6	..
Camden and Amboy.....	64	..
Morris and Essex.....	35	45
New-Jersey.....	31	..
New-Jersey Central.....	36	26
Paterson and Ramapo.....	33	..
Trenton Branch.....	6	..

PENNSYLVANIA.

Alleghany Portage.....	36	..
Beaver Meadow.....	36	..
Carbondale and Honesdale.....	24	..
Columbia and Philadelphia.....	32	..
Westchester Branch.....	9	..

* This includes the Eastern (N. H.) Railway, which is owned and operated by the Eastern (Mass.) company.

† This includes the Albany and West Stockbridge Railway in New-York, which is owned and operated by the Western Railroad Company.

*Memphis and Charleston.....	281½
Winchester and Huntsville.....	60
Mobile and Ohio.....	119½

KENTUCKY.

Frankfort and Lexington.....	98
Louisville and Frankfort.....	65
Mayesville and Lexington.....	70
Covington and Lexington.....	78
Lexington and Danville.....	87
Louisville and Nashville.....	180
Mobile and Ohio.....	39½

MISSOURI.

Pacific.....	315
Hannibal and St. Joseph.....	200

OHIO.

Cleveland and Columbus.....	135
Columbus and Lake Erie.....	61
Dayton and Springfield Branch..	24
Findlay.....	16
Little Miami.....	84
Mad River.....	134
Sandusky and Mansfield.....	56
Xenia and Columbus.....	54
Bellefontaine and Indiana.....	118
Cincinnati and Marietta.....	188
Cleveland and Pittsburg.....	98
Cleveland, Norwalk and Toledo..	87
Cleve, Painesville and Ashtabula.	71½
Columbus, Urbana and Piqua....	93
Cinc., Wilmington and Zanesville.	160
Cincinnati, Hamilton and Dayton.	60
Dayton and Western.....	35½
Dayton and Xenia.....	15
Greenville and Miami.....	40
Hamilton and Eaton.....	86
Hillsboro'.....	87
Iron.....	50
Junction.....	110½
Ohio and Indiana.....	126
Ohio and Mississippi.....	20
Ohio and Pennsylvania.....	81 104
Ohio Central.....	25 125
Scioto and Hooking Valley.....	120
Stuebenville and Indiana.....	121
Pittsburg and Cincinnati.....	110
Dayton and Michigan.....	25
Eaton and Piqua.....	30
Hudson and Akron Branch.....	50
Franklin and Warren Branch....	30

INDIANA.

New-Albany and Salem (with Branch around Lake Michigan of 54 miles).....	117 279
Jeffersonville.....	50 16
Madison and Indianapolis.....	86
Shelbyville Branch.....	16
Rushville Branch.....	20

Knightstown Branch.....	27
Lawrenceburg and Indianapolis..	90½
Indiana Central.....	71½
Richmond.....	4
Newcastle and Richmond.....	27
Indianapolis and Bellefontaine..	48 41
Peru and Indianapolis.....	28½ 50
Lafayette and Indianapolis.....	68
Crawfordsville.....	26
Terre Haute and Indianapolis....	72
Evansville and Illinois.....	26 24
Martinsville Branch.....	29
Indiana Northern.....	100 35
Extension of the Greenville and Miami.....	10
Ohio and Mississippi.....	160

ILLINOIS.

Illinois Central.....	699
Galena and Chicago.....	94 88
Rock Island and Chicago.....	180½
Central Military Tract.....	125
Peoria and Ogawka.....	100
Ohio and Mississippi.....	145
Northern Cross Road.....	54
Sangamon and Morgan.....	54
Alton and Sangamon.....	72
Aurora Branch.....	13
St. Charles.....	7
O'Fallon's Coal Road.....	8

MICHIGAN.

Central.....	228
Southern.....	133
Pontiac.....	25
Tecumseh Branch.....	8
Erie and Kalamazoo.....	33

WISCONSIN.

Milwaukee and Mississippi.....	20 180
Fond du Lac & Rock Island Valley	241

TEXAS.

Buffalo, Bayou and Brazos.....	32
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Total number of miles in operation and in
course of construction in the United States.

	Miles in operation.	Miles in progress.	Total.
Maine.....	315	128	442
New-Hampshire..	489½	47	536½
Vermont.....	380	59	439
Massachusetts..	1089	67	1156
Rhode Island.....	50	32	82
Connecticut.....	547	261	808
Total in N. E.....	2870½	593	3463½

	Miles in operation.	Miles in progress.	Total.
New-York.....	1826	744	2571
New-Jersey.....	226	111	337
Pennsylvania....	1146	774	1920
Delaware.....	16	11	27
Maryland.....	876	125	501

* This includes that part of the route which passes
through the states of Mississippi and Alabama.

Virginia.....	478	818	1296
North Carolina..	249	385	634
South Carolina..	340	298	638
Georgia.....	754	229	983
Alabama.....	121	189½	310½
Mississippi.....	93	273	366
Louisiana.....	63	—	63
Texas.....	—	32	32
Tennessee.....	112	748	860
Kentucky.....	93	404½	497½
Ohio.....	828	1892½	2720½
Michigan.....	427	—	427
Indiana.....	600	905	1505
Illinois.....	176	1463	1639
Missouri.....	—	515	515
Wisconsin.....	20	421	441

Total in Middle,
W. & S. States..10,814½ 10,878½ 21,693

RAILWAY PROGRESS IN THE UNITED STATES.—The extraordinary progress of the United States in railway construction, strikes every one interested in the current history of passing events; and the success of this country in this element of national greatness is at once an index of the energy and intelligence of the people, and a matter of admiration to other nations. The railway is comparatively a new method of transit. The old tramroads were, in some degree, in use in the coal mines of Great Britain; but the first regular railway was the Stockton and Darlington, which was constructed by Mr. Stephenson, and finished in December, 1825. Some time in 1826 Mr. Stephenson commenced operating this road by the locomotive. Two years after that, in 1827, was built the Quincy railway, in Quincy, Massachusetts. It was only three miles in length, and was used only for the transit of granite from the ledges to tide-water. In 1829 there was constructed some twenty-five miles of railway in Pennsylvania, for coal purposes. On December 26, 1829, thirteen miles of the Baltimore and Ohio railway, in Maryland, were opened. In 1831 there were six miles of railway in South Carolina. In 1832, seventeen miles of the Mohawk and Hudson railway were opened. In 1832 Kentucky had six miles of railway constructed. In 1835 Virginia had twelve miles; New-Jersey, thirty-four miles; Delaware, sixteen miles; Alabama, forty-six miles; and Louisiana, forty miles. The total number of miles of railway finished in the United States in 1832 was one hundred and thirty-one; in 1833, five hundred and seventy-six miles. The following table will give an idea of the progress from year to year, from the earliest period mentioned above, throughout the United States:

Year.	Miles.	Year.	Miles.
1828.....	8	1841.....	3,319
1829.....	28	1842.....	3,877
1830.....	41	1843.....	4,174
1831.....	54	1844.....	4,311
1832.....	181	1845.....	4,511
1833.....	576	1846.....	4,870
1834.....	762	1847.....	5,236
1835.....	918	1848.....	5,682
1836.....	1,102	1849.....	6,350
1837.....	1,421	1850.....	7,855
1838.....	1,843	1851.....	9,090
1839.....	1,920	1852.....	11,565
1840.....	2,167		

RAILROAD PROSPECTS AND PROGRESS.*—POSITION OF TENNESSEE IN REFERENCE TO RAILROADS.—DUTY OF THE STATE IN CONSTRUCTING ROADS—THEIR INFLUENCE, SOCIALLY, INDUSTRIALLY AND POLITICALLY—WHAT THE SOUTH SHOULD DO TO REGAIN OR RETAIN POWER—GROWTH OF THE RAILROAD SYSTEM, ETC., ETC.—In the history of our country, the star of empire has been westward. Population, wealth, refinement, intelligence, have all been sweeping into the great western valley. The crowning achievements of them all, the telegraph and the railroad, twin sisters, are now ready, and waiting to perform their glorious mission in elevating and perfecting our civilization and our progress.

I stand upon the soil of Tennessee, and, for the first time, in its proud capital, Tennessee, the first growth of western progress; Tennessee, where sleep two presidents of this republic, the man of iron will, who throttled the British lion, and he whose career of fame and honor has just now ended in the gloom of death! a state with a million of inhabitants; with inexhaustible agricultural, mineral and manufacturing resources in embryo or in development; with public credit entirely unimpaired, and with none of the trammels of public debt.

Gentlemen, should Tennessee sleep in this age of progress? In her central situation, with her wealth and her resources, and a country as favored as any upon which the light of God's sun has ever shone, should Tennessee sleep, and let the star of westward progress pass over her, leaving her upon the horizon rather than in the zenith? I think I see it and hear it in every thing around me—never, never! You are prepared, then, to act, gentlemen; the south demands it from you—the southwest, in whose councils you are destined to lead. The eyes of all the states are upon your legislature, which is now in session, and which I am informed, and which I in part know, is one of the most enlightened and liberal that has

* Speech by the Editor at Nashville, Tenn., 1851.

ever met in your capital. All their public works are striking for your state to radiate through it, and to project to the north, the east, the south and the west, making Nashville, indeed, a queen city—a depot of travel and of freights for the great lakes and the gulf of Mexico—for the Atlantic seaboard and the mighty northwest.

Gentlemen, the spirit of improvement and progress which has descended upon you, is sweeping down the valley of the Mississippi, and producing its wonderful results in all of the states to the southward of your limits. It is for you, legislators, the first to sit during this excitement of the public mind, to lead the way and direct the spirit of the times to immediate and practical results. Indicate your course of policy, and let it be a broad and liberal one, something worthy of a great state like Tennessee; and believe me, when I say it, that Mississippi and Louisiana will unite upon the same platform of improvement with you, and that Alabama and Arkansas and Texas will respond to the extent of their means and capacities. These states are but in the infancy of progress and improvement, and are now looking to you to pave the way for a system which henceforward shall emphatically be known as the *southeastern* system. With your resolutions and acts in their hands, the friends of improvement may walk boldly, and I believe triumphantly, into the legislatures of Mississippi and Louisiana, which are soon to be in session.

Gentlemen, with all your wonderful resources, you are, perhaps, worse off than any state in the Union with regard to a market. You are shut in by mountains on the one side, and on the other shut off from the Mississippi by little streams which you call "rivers," which drag their slow length along, and approximate to John Randolph's idea of the Ohio, a river which, when it is not locked up in ice, has run dry of water. How can such a state work out a high destiny! If we must be dependent upon her slow wagons, though they run upon turnpikes, her beautiful Nashville might as well be a Timbuctoo, for what the rest of the world shall know of it. God may have given you coal and iron sufficient to work the spindles and navies of the world; but they will sleep in your everlasting hills until the trumpet of Gabriel shall sound, unless you can do something better than build *turnpikes*. You may have granaries sufficiently stocked to feed mankind, but mankind will starve and perish before a bushel of grain can reach them.

I honor the spirit which has given to your state, in her turnpikes, the very best common roads in the world. Honor to Tennessee for her liberal state and individual contributions. These turnpikes were a great march in advance, and are but the pioneers of other im-

provements. They are a step in progress; though like the hand-loom and the flat-boat, and the old-fashioned spinning-wheel, they have become obsolete. To rest upon these turnpikes, and to go no further, would be as reasonable as the act of the old hand-loom weavers who conspired against steam, or the scribes and copyists who rebelled against the printing press, as an invention of the devil and Dr. Faustus.

You have about 1,000 miles of turnpike, which have cost on an average \$8,000 per mile, or \$8,000,000. These are now paying but small *money* dividends. The reason is, that turnpikes are very costly modes of communication, and will invite no other trade than that which of *necessity* belongs to them. Charles Ellet, Esq., of the Virginia Public Works, estimates the freights on turnpikes to cost 15 and 20 cents per ton per mile; whilst on railroads they are but $2\frac{1}{2}$ cents, and canals, $1\frac{1}{2}$ cents. Yet, gentlemen, these *money* dividends are but a small consideration. I am told by intelligent gentlemen along the route of your turnpikes, that land has appreciated in value from \$2 to \$10 per acre. If this be the case, the roads have more than paid for themselves. Take a road of 100 miles, and suppose a cost of \$5,000 per mile, \$500,000, and suppose land on each side for five miles back to be raised in value only 70 cents an acre, you have the whole of the investment! I defy the proof that the average advancement has not reached this figure. If, then, with this imperfect and now almost obsolete mode of communication, so much has been added to the value of your landed property, how much may you expect from that physically perfect mode which is called a railroad, and which can carry off the surplus of your lands at one fifth the present cost of doing it, as well as increase the demand for this surplus.

Do you ask how it is that a railroad or a canal raises the price of land? The case is simple. I will take for illustration that of a planter having to do fifty miles of wagoning, and thousands of bales of cotton are wagoned from 100 to 200 miles. Suppose the wagoning be to Nashville: can this cost less than \$2 per bale?—commissions at Nashville, &c., 50 cents—freight by the river to New-Orleans, \$1 50—insurance, 50 cts.—total, \$4 50. Now, suppose a railroad direct to New-Orleans from this planter's door, and $2\frac{1}{2}$ cents the ton per mile be charged, say 550 miles, we have \$8 50, a saving of \$1 per bale. Now, on a tract of 1,000 acres, producing 500 bales, we have a saving of \$500, or 50 cents on each acre, to say nothing of saving in return freights, travel, &c. Fifty cents is the interest on \$10. But this, gentlemen, shows nothing like the truth, as all experience proves. Proximity to market, and the capacity to take advantage of all its phases, com-

venience of access to the world, the general comforts and safety of railroads, the new lands which they bring into cultivation, and the enhanced demand for interior products of every description which they induce, even down to the smallest ones of the dairy and the farm-yard—all, taken together, swell the increase in the value of land, near to which a railroad passes, from \$5 to \$10, and in favored spots even \$20 an acre.

For example, suppose a railroad running through one of your counties—Davidson, for example—thirty miles long, having cost \$15,000 the mile, \$450,000, and suppose the lands on each side for fifteen miles back to be raised in value but \$1.30 per acre, you have the whole of the investment at once returned to the county the moment the road is finished. Will not the increase be double this!—to say nothing of the ordinary dividends on roads, which are seldom less than the usual per centage on capital and industry.

If nothing more were said, would not the argument be irresistible!

I take the position that there is not in the world an interest more promising at this moment than that of railroads. In England they are paying an average dividend of 4 per cent. on the present value of shares, being much more than the average interest of money. In the United States, the average profit is stated by the Railroad Journal at 6 per cent. I know it will be said there has been a depreciation in the value of railroad stocks in both countries, and that in England hundreds of millions have been lost. I admit it; but can human prudence guard against occasional extravagances in every branch of affairs, particularly in novel ones? Where the touchstone of experience cannot be supplied, prodigality and recklessness will result. But this period has gone by; and it is fortunate for us that we begin with all the experience which it has cost the world hundreds of millions to acquire. If these occasional disasters in railroads be made any thing of, let us ask in what department of business have there been fewer disasters? Certainly not in commerce, for, gentlemen, in the item of banks alone, the country lost in ten years \$150,000,000; certainly not in manufactures, for we know that this interest continually fluctuates, and that large capitals are often sunk in a few years; not even in agriculture, for you will all remember the shipwreck which came upon the planters after the bursting of the banking bubble in 1827. The Massachusetts and the Georgia railroads are now paying 8 per cent., and in many cases 10 and 12. The Georgia railroad, from Atlanta to Augusta, paid 6 per cent. in the first six months from the time of its completion; and in 1847, 10 per cent. on a capital of \$2,200,000. The Baltimore and Ohio road, on a cost of \$50,000 per mile, pays 6½ cents; and would, unfinished

as it is, says Mr. Segar, pay much more, but that it is compelled to take up much of the original superstructure.

Well, gentlemen, if railroads produce all of these results, can you justify yourselves in remaining without them? You cannot, and I think you acknowledge it. What then is to be done, and where are you to begin?

Without doubt, it is the first duty of the state to lead off, and she as much owes this to her people as she does the duty of protecting their lives and their property, or any other act of government. In all history, government has been held bound to construct and keep up the public highways of the country. We are all familiar with the magnificent highways of old Rome; the ruins of which give us no meagre idea of the magnificence of that ancient empire. The principle is, that communication should be left open and free, and that the people, with their products, should pass easily and economically where they list; and that this is the duty of government. Now, in the progress of science and civilization, it has been discovered that the old sixty-foot road cut through the woods is not such a speedy and free and cheap mode of communication as is adequate to the wants of a people who are advancing in the modern ratio of civilization and improvement. Is the government then doing its duty when it adheres to these roads? Should not government be progressive, and keep pace with the wants of the people? If they ask bread, should it give them a stone? In its construction of roads, government should avail itself of all the improvements of the age. The most economical and best road, upon the whole, should be adopted; be this clay road, Macadam road, or turnpike. You have admitted the argument in regard to turnpikes. Does it change the principle to go a step further? Your turnpike grade solidifies the roads, at large expense, to prepare them for the ordinary vehicles of travel. These vehicles are getting out of popular use, and are being substituted by a different class, which require a different description of road, to wit: a road of parallel sills, with iron bars, to resist the friction, instead of rocks and gravel. Now, gentlemen, if all the world is adopting this description of road, and if the old highways are clumsy and expensive, and behind the times, it is a perfect mockery to say that government must adhere to them, and is doing its duty in going no further. The railroad is nothing but the common road made perfect. The cars, the engines, &c., and the working of them, are a different matter, and these may be left to individuals as we now leave them to work their own carriages and wagons. Hence I interpret the duty of government, in keeping up its roads, to mean simply that the roads should be adequate to the requirements of the kind of vehicle most

preferred and used, whether it be carriage, wagon, or railroad car. To accommodate solely and provide solely for one class of vehicles, and that the meanest and the worst, would be to retain the old trial by battle, the fictions of John Doe and Richard Roe, or any other of the legal caprices of our respectable ancestors. But if this argument in favor of government's building railroads be not granted, let us suppose, for some reason or other, say from inundations, it became entirely impossible to use the common roads or turnpikes at any time for travel, would government be entirely exonerated from the duty of giving the people outlet and communication? Is it not practically impossible now for the people to use the ordinary highways, and compete in industry and progress with their neighbors all over the world?

Yet, I would not stretch the argument so far as to say that government should exclusively construct the railroads of the country; nor do I pretend to advocate the policy of grading and laying down the track and the iron at public expense, though my parallel may have carried me thus far. I am in favor of leaving every thing possible to individual enterprise, because I believe individuals can operate with more success and economy. If individual enterprise were adequate to the construction of railroads, I should be willing to leave the matter there; but as it is not, and as it is conceded that the federal government has no power, the *necessity* devolves upon the states. I say individual enterprise is *not* adequate. It has not been found so in communities where dense population and advanced industry have generated enormous surplus capital; how much less must it be adequate in the sparse population and meagre savings of a country like the southwest! Massachusetts, for example, has granted state aid to her roads to the extent of \$5,500,000; Georgia, \$3,500,000; Virginia, three fifths to all roads; Michigan, \$6,000,000; North Carolina, which we had thought fast asleep, \$2,000,000 to a single road. In no state have railroads succeeded without some such aid, and where they have been extensively adopted, this state aid has been the great impulse. Without it, few of these brilliant results would have been achieved. Without it, we, in particular, should linger along for a generation in effecting what others have done in four or five years. We have no time to lose. Every day increases the distance between ourselves and our enterprising neighbors, and makes the contest between us a more hopeless one.

You are aware, gentlemen, that the state of New-York has outstretched her hands to the extent of millions in aid of her public works, and that she is reaping the fruits in ten thousand ways. They have already repaid their cost over and over in the en-

hancement of property and in dividends. In a few years the revenue of these works will free the people of that state for ever from taxation. A single act of legislation has appropriated \$12,000,000 for the enlargement of the Erie Canal.

Pennsylvania, it was thought, had bankrupted herself by her enormous debt contracted for internal improvements. Her example of repudiation was pointed to as a striking example of the impolicy of large state aid to railroads. But what is the fact in Pennsylvania? Is she not infinitely richer from her public works? Has she not redeemed her honor, and do not these works already enable her to maintain her engagements promptly? Gentlemen, with all the liberal appropriations by states in aid of railroads, I know of no instance in which the public weal or credit has permanently suffered. I defy a single example. Where large and unproductive debts have been created, it has not been for this purpose. It has been for banks, which add nothing permanent to wealth, and in passing away leave no traces behind them. A railroad is an addition to the wealth of the community—it is so much value that stands there and cannot be destroyed; and a state might as soon expect to bankrupt herself by such investments, judiciously made, as a vender of patent medicines bankrupt himself by extravagant expenditures in advertisements.

The safe and sound rule is for the legislature to meet individual enterprise half way in the matter of railroads, and stimulate it onward by liberal grants. For example, let the policy be a permanent one: that whenever a company has paid in its stock and completed its grading and its woodwork, and is ready for the iron, that the state will furnish this iron, by endorsing the bonds of the company. These bonds will then be readily negotiable. It will not be creating a state debt; for who can doubt that the roads will be able to pay promptly the interest on the bonds? If the railroad pays a dividend of but two to three per cent. per annum, (and what railroad in the United States is not paying twice as much?) it can redeem these outstanding bonds, which will amount to only one third or one half of the whole capital of the road; or if we take the almost impossible case that the company cannot keep down the interest, the state has its lien upon all its works, and can, of course, sell out and reimburse herself at any moment; and what road will not sell for more than the cost of the iron?

This system will work well, for it may properly be left to private enterprise to select its routes, and there is no danger that these will be too numerous. Men are generally wide awake to their own interest; and in this enlightened period, when there is so much knowledge and experience abroad in regard to

railroads, errors can hardly happen. Routes that are not demanded or likely to be profitable, will scarcely secure the investments of shrewd and calculating capitalists. But even if the state were to sink some of her capital in this manner, and incur some permanent public debt, in what more glorious cause could it be done? States are ever ready to bankrupt themselves with debt for fleets, and armies, and wars. Ours is a measure of peace; and whatever permanent debt, be it remembered, that it brings, it brings at the same time, in the increase in the value of every description of property, the *tax-paying fund to meet this debt*.

Gentlemen, it is high time that the south and the west should do something to gain a position in this confederacy which is not dependent and degrading. We must seek for some more profitable investments of our capital than those we have relied upon in the past. Why are we for ever nerveless, in debt, and without surplus for any purpose, and must run off to the north whenever we would procure a little capital to work a mill-site or dam a river? We invest nearly every thing in a staple which is for ever at one extreme or the other. We are offered large prices when we have none to sell; but when our warehouses are laden with it, we can find nobody willing to buy.

The construction of a system of railroads at the south, in addition to its other advantages, will have this: that it will divert a large slave force into more profitable channels than agriculture. The planters will find inducements to employ a portion of their force in all the works of grading, embankments, cutting timber and fuel, bridging, &c. Indeed, by the employment almost of the surplus labor of the plantations, railroads might in many cases be constructed, being thus almost a clear gain to the wealth of the country. We already find these *work* subscriptions, as they are called, have become popular in the south.

But not only will this division of labor occur, which will be very great, but the construction of railroads, in leading to the development of the mineral resources of a country, in giving them an outlet and in promoting manufactures, in securing them an expeditious and safe access to market—for this has been the result every where, gentlemen, throughout Pennsylvania, New-York and New-England—the construction of railroads will lead to other diversions of labor and capital, which must be greatly beneficial to the south; and we cannot hope to bring about these diversions by any other means.

Upon whom are we dependent for our manufacturing necessities!—the shoes on our feet, the hat on our head, the cloth in our coat, the shirt that we wear, down to the very pin and button that fastens it!—answer, the north: a people who are becoming in a large part ho-

tile to us in interest and in feeling—who have estimated our connection by the dollars that it would bring them—who have excommunicated us as slaveholders at the sacred altar, and thanked God they were not like us poor publicans; a people who have enticed away our slaves, mobbed us when we have attempted to reclaim them, and, like the hard Egyptian task-masters, continued to exact the tale of brick after they have taken away from us the straw with which we could make it; for, gentlemen, the north realizes out of our cotton fields as much as we do ourselves, and, in the manufacturing which she conducts for us, makes a clear annual profit of over \$40,000,000 per annum.

But when we come to commerce—that commerce which has made the north great and powerful—how much of it is the result of southern labor! The whole carrying trade of your products and the return cargoes are entirely in their hands, bringing them a profit of their own showing of \$40,000,000 more per annum. And this, too, gentlemen, when, before the revolution and before our present government, the southern colonies, with a less population than New-England, New-York and Pennsylvania, exported abroad *directly* nearly five times as much produce. In the same period, Carolina and Georgia exported twice the value of New-York, Pennsylvania and New-England. In the years from 1821 to 1830, New-York alone exceeded these states.

Here, then, are eighty millions of dollars taken annually from us, and which legitimately should have been retained in our midst, and which will yet be retained here, if we are true to ourselves.

But this is not all; how much more does the north receive from us annually in the support of her schools and her colleges, her editors, her authors and her clergy, her Saratogas and her Newports, her allurements of various kinds!—and more than all, how much do her citizens, who come among us to gather wealth, return home with, to build up those colossal interests there which are the wonders of the world? Is there any reciprocity, sirs? Who of the north “reads a southern book”—they have said this themselves sneeringly—who visits a southern watering-place—attends a southern college? I think it would be safe to estimate the amount which is lost to us annually by our vassalage to the north at \$100,000,000. Great God! does Ireland sustain a more degrading relation to Great Britain? Will we not throw off this humiliating dependence, and act for ourselves? What a country would be the south, could we retain this money at home; what ships and navies we should have—what dense metropolitan and magnificent cities—what manufacturing establishments, making every hill and valley vocal with the whirl of machinery—what railroads, radiating to every village and town,

like the arteries from the human heart—what mineral resources developed—what watering-places, crowded with wealth and fashion and beauty—what schools and colleges, in which our sons should be reared to fidelity to their native south—what dense population—what wealth and what power!—and yet we are now poor and scattered, and in this isolation and dependence of our condition, afraid almost of our very shadows upon the wall.

Throw off this yoke of bondage, and begin to show your manhood at once. We are poor and suppliant, whereas we should be rich and great. In a question between the north and south, I prefer the south. Charity begins at home. Not that I love Caesar less, but Rome more. Whatever divisions exist in southern politics, there can be none upon this of *Southern Industrial Independence*. Fire-eater and compromiser must all meet here, unless they go beyond Scripture, and love others *better* than themselves. Here is a separate state action upon which all must agree—that of loom, and spindle, and locomotive. This is the extent of my "fire-eating." "If it be *treason*, make the most of it!"

"Let us then be up and doing
With a heart for every fate;
Still resolving, still pursuing,
Learn to labor and to wait."

Gentlemen, I am among you as a delegate from New-Orleans, to speak to you upon this subject of railroads, and invoke your action with hers. I wish I had more power of popular oratory to speak to you and to rouse you into action; but my efforts have generally been in a different field, and one in which I hope I have been able to do the south some service. I have never once faltered in that field, and I trust in God I never shall in any time of trial and of difficulty.

In every period of your history, gentlemen, New-Orleans has been your commercial centre—your outlet to the markets of the world. You are as familiar with its highways and its by-ways as we are ourselves—its places of fashionable resort and amusement. Why, almost every other man that we meet in our streets in the wintry season is a Tennessean, and half the witching beauty and loveliness of the female form, which makes Chartres street a very eastern bazaar, traces its origin to Tennessee. When New-Orleans was in the hands of the Spanish and the French, you vowed, by all the powers, she should be yours, and you got her. When New Orleans was menaced by an insulting foe, whose watchword was booty and beauty, the glorious chief of the Hermitage swore "by the Eternal," she should be saved, and you saved her. Tennessee and Louisiana have ever been linked together; and whom God and your rifles have put together, let no man put asunder. We intend, gentlemen, to preserve this relationship to you.

We intend that you shall not go off to the sea-board, to Charleston, Savannah or Richmond, dear as they are to us, or any where else, but shall stand by us, and we will stand by you, and our growth and our power shall be together. You may set that down as a fact, do what you please. If you will not come to us, we come to you. "Mahomet comes to the mountain," &c., &c.

Gentlemen, let me give you a history of New-Orleans. In her infancy she bid fair to be a very Colossus, and to outstride, in her march to commercial greatness, almost every other mart upon the continent, making of herself another Tyre, or Sidon, or Venice, of whom it has been said in poetry—

"The trade and commerce of the city
Consisteth of all nations."

New-Orleans has suffered herself to sleep soundly in the arms of all the prosperity which the God of nature seemed to have showered upon her. Like Achilles of old, she conceived that a Deity had lent her armor, and, as the pet child of destiny, she must be for ever invulnerable. Bewildered in her dreams of eastern magnificence and rank, as she contemplated herself at the very foot and receptacle of all the greatest and most magnificent rivers upon earth, which rippled in their distant sources among the mighty gorges of the Rocky Mountains,

— "Where rolls the Oregon,
And hears no sound, save its own dashing;"

with fifteen great states of the confederacy claimed to be inalienably tributary to her, and as many more, perhaps, in embryo; with a position which looks out upon the beautiful and glowing islands of the gulf, or over equatorial climes, tracing the magnificent, yet undeveloped empires of South America; the connecting link between two great continents, with almost the control of that isthmus-connection over which it has been fondly conceived the rich commerce of eastern climes might be diverted, New-Orleans, like a pet child of destiny, has laughed the doubter into scorn, and said unto herself, "Go to—let us take our rest—eat, drink and be merry;" and who shall gainsay us? Let the waves beat; we are upon the everlasting rocks, against which their fury shall be expended in vain. We shall tithe and tax, and levy contributions upon the world, as we hold the keys of so much of its wealth! Shall we delve and spin who are Nature's great custom-house officers, administering her tariffs and her revenues? Away with your fears and your admonitions!

"We care not, fortune, what you us deny;
You cannot rob us of free nature's grace,
You cannot shut the windows of the sky."

This was New-Orleans; but what is New-Orleans now? Where are her dreams of great-

ness and of glory? Where her untold wealth in embryo? Whilst she slept, an enemy has sowed tares in her most prolific fields. Armed with energy, enterprise, and an indomitable spirit, that enemy, by a system of bold, vigorous and sustained efforts, has succeeded in reversing the very laws of nature and of nature's God—rolled back the mighty tide of the Mississippi and its ten thousand tributary streams, until their mouth, practically and commercially, is more at New-York and Boston than at New-Orleans. Thus have the fates mocked and deceived us in promising rank and greatness so long as the mouth of the great rivers should remain at our doors; and well might we exclaim, in the language of Macbeth to the weird sisters—

“ Accursed be the fiends
That palter with us in a double sense,
That keep the word of promise to the ear,
But break it to the hope!”

New-Orleans is now the prodigal, who has wasted her substance in riotous living. She has come to herself. Her conversion has been sudden and little less than miraculous. What the shock of all the north could not effect, came almost from her very doors. It was to be expected the north would steal from us: thrift belongs to them; but to think of the presumption of a little neighbor, whom we had a long time been intending to extinguish, some convenient day, in our *overwhelming greatness*—MOBILE—to think of Mobile coming in for a share of spoils, and boasting that, by a railroad, she could strike at our last fortress, and leave us so poor that none might do us reverence, by emptying the Ohio and the Tennessee into her basin!

Gentlemen, though I honor and respect the energy and spirit of Mobile, this was the unkindest cut of all, and it has roused the dormant energies of New-Orleans. Her citizens stand to their arms, and they invoke you to stand by them. They have determined to intercept their trade, which is about stealing off to Mobile and Charleston, and to bring back the fugitive trade that has already gone to the north, by reviving the road they projected to your capital, and actually commenced fifteen years ago, and they would strike entirely through your state for the Ohio river.

Gentlemen, these new roads are commenced under bright auspices. All the capital and enterprise of Louisiana and of New-Orleans are pledged to the completion of the road to Jackson, in the state of Mississippi. Already the company is formed, and the engineers are in the field. Louisiana will complete this road, and that within a few short years. Mississippi has resolved that the work shall not be stopped there: her citizens are meeting in county assemblages and general conventions, and pledge themselves to go on with it. I have just returned from a tour entirely through

the state, and found the railroad fever only a little less than the political. The planters are out of debt, and have the means to subscribe largely, and the state has a large surplus in her treasury, which she will appropriate. There are two great routes advocated, in addition to the Mobile and Ohio road, which passes through the state, both of which project from the neighborhood of her capital. One of them takes the direction of her northeastern counties, and will strike the Tennessee river at some point which shall intersect with the road you are proposing from Nashville to that point. The other road will extend due north, enter your state, and strike for Jackson, in Madison county, to intersect there with the Mobile and Ohio road, and proceed on a common track thence to the Ohio river, opposite Cairo, where the Illinois Central Railroad will then make the railroad connection complete and almost unbroken, from the Gulf of Mexico to the great lakes. Should an intersection not be practicable with the Mobile and Ohio road, the New-Orleans road will take a due northerly course, through the counties of Fayette, Heywood, Gibson, and Weekly, in Tennessee, to the Kentucky line, and thence onward.

It is in behalf of these improvements I am here to speak to you. Gentlemen, extend them a ready help. The subject is high above all local considerations and rivalries. They are magnificent works. You cannot be content with a connection with Charleston and with Louisville. These roads will throw you at once upon the Atlantic and the gulf, upon the great lakes and the mighty northwest. This is your destiny. You will be in the heart of the world. Your beautiful capital shall become the Athens, as New-Orleans will be the Carthage or the Rome, of the western valley!

Gentlemen, the people of New-Orleans propose to hold, on the first Monday in January next, a great convention in that city of the people of all the southern and southwestern states, for the purpose of concentrating the strength and energy of them all upon a system of railroads, which shall radiate through all our limits, and raise us to a level in this particular with the north. A committee was appointed to prepare and issue an address to the people, a copy of which I hold in my hand, and to visit the states and legislatures for the purpose of addressing them. I have the honor to be included in that committee. We invite you to this convention, and trust that you will be represented by your most enlightened and enterprising citizens. Such men, coming together from every part of this wide region, must exercise hereafter a great influence upon public opinion. Much valuable information will be elicited, and great practical results follow. Such conventions have ever been found powerful means of advancing great causes. They are the potent engines of popular action.

It was but the other day a Southern Merchants' Convention assembled in Richmond. Several great internal improvement conventions have been held at Memphis, St. Louis, and Chicago. The extreme southwest has never moved until now, and what point could be more interesting and important for the meeting of this great railroad convention than New-Orleans?

And indeed, gentlemen, if there were wanting other considerations to induce the people of the southwest to enter upon the construction of a system of railroads, extending through every part of their limits, it would be easy to find them in the peculiar position which they sustain with relation to the rest of the world. They have an interest in each other's prosperity, founded upon common hopes, and fears, and dangers. Menaced, as they are, from so many quarters, it becomes them in every possible way to strengthen themselves at home. The interests of Mobile, New-Orleans, Charleston, or Savannah, in each other's advancement, are stronger than their interest in the advancement of Boston or New-York. These interests should preclude all jealousies and rivalries, and induce a generous coöperation in every instance where the benefit of the whole south is at issue. Such a course cannot be in conflict with the individual interests of any. By opening or creating new avenues of trade and production, and extending our operations at home and abroad, it is possible for these cities, and all others in our midst, to go on enlarging, and increasing, and extending their influences, without at all affecting the progress of each other. In so wide a field there will be room for all. The progress of Boston has not destroyed New-York, but has rather diverted her energies into new and profitable channels. It was an idea of the middle ages, as barbarous as it was false, that one community could only advance at the expense of another. The benefits of trade are reciprocal. Light up the torches of industry at home, said Benjamin Franklin to his countrymen, on finding that all hope from British tyranny had fled. This shall be our salvation. We shall be feared and respected in proportion as we are strong and powerful. We shall demand and receive our rights, and not entreat and compromise for them, as we are often forced to do.

It may be an unwelcome truth, but we cannot disguise it—the institutions, and, of course, the very existence of the south, are in constant danger. The hands of all mankind seem to be against us. All the great powers of Europe menace our institutions. If we had made our peace for ever with the north, looking into the distant future, the danger is still pressing and great. We want *physical* strength, the sinews of defenses and war. These will come from *diversified* industry. It was this that enabled Britain to resist the shock of Napoleon, and of all the world. *She*

was the workshop of the world! There is no hope for the south but in this. She cannot recede. She must fight for her slaves or against them. Even cowardice would not save her. One of Homer's heroes thought that cowardice would be justified if men might live for ever; but even in that deep shall we not find a greater deep still opening to devour? Let us do our parts like men, and the consequences will be controlled by God.

I am not afraid of the south and of slave institutions. All spirit is not yet extinct. In the best periods of the history of the country, the south was the controlling power. Her enterprise "is not dead, but sleepeth." I cannot forget the early commercial history of the south. I cannot forget that she had at one time the longest railroad in the world, or that one of her citizens, Stephen Elliott, was the first to project a great railroad connection from the Atlantic to the Mississippi valley. One of her citizens died in the service of this work. Many of you recollect the visit of Robert Y. Hayne to your capital, and the burning eloquence with which he spoke to you upon this subject. Yes, gentlemen, the south and *slave institutions* have, in all the brightest periods of history, enacted the highest parts in the drama. The Roman slaveholder carried the eagle and the legions to the end of the earth, and made Italy the theatre of the world's glory. The Greek slaveholder penetrated almost to the frosty Caucasus—

"Shook the ars'nal,
And fulmin'd over Greece
To Macedon and Artaxerxes' throne."

All the civilization, arts, sciences, literature, laws, every thing that was glorious and great in ancient times, sprung from the *southern* states of Greece and Rome, and the southern slaveholders, whilst the Scythian and Scandinavian barbarians of the north dwelt beneath the earth in their mountain fastnesses. When our own continent was discovered, it was only in the south, in Peru, and in Mexico, that any civilization or arts were discovered. May it not—and it will not, if we are true to ourselves—happen again that southern civilization shall be overthrown and crushed out, and trampled under foot, by the powers which shall be brought against it?

I will detain you but a little longer, and that will be with my legitimate subject of railroads. When Mr. Stephenson, of England, in 1832, was advocating the Manchester line, they laughed at his idea that an eventual speed of twelve miles an hour might be attained. Soon after, the London Quarterly made infinite sport of the proposition that eighteen or twenty miles could be reached. We should as soon expect, it said, the people of Woolwich to suffer themselves to be fired upon by one of Congreve's ricochet rockets, as trust themselves to the mercy of such a

machine, going at such a rate. In the present year, upon the Great Western Road in England, an average speed of forty-eight miles per hour has been attained without stoppages; and we learn that, for a short distance, over seventy miles has been reached; and that scientific man, Dr. Lardner, would not fix the practical limit at short of two hundred miles an hour! A member of Parliament declared, in opposition to the Manchester road, that a railroad could not enter into competition with a canal. Even with the best locomotive the average rate would be $3\frac{1}{2}$ miles per hour, which was slower than the canal conveyance. The Buffalo and Albany road runs side by side with the great canal of New-York, a distance of 350 miles, and has conducted such extraordinary freights and travel, that it has been found necessary to build another parallel road of greater length, from Dunkirk to the city of New-York. The Baltimore and Ohio Railroad transports coal and iron at 1¢ cents per ton, which is as low as the canals, or, all things considered, as freights on western rivers. When Mr. Clinton was advocating the Erie Canal, a member of the legislature asked, inquiringly, where the water was to come from to fill up this great ditch? "You need give yourself no uneasiness," said another; "the tears of the people will fill it." And yet railroads are in their infancy; for only twenty-two years ago there was not in our broad land a single locomotive engine, says the Railroad Journal, in successful operation. In this period, freight and travel upon them have been cheapened one half to two thirds. Cheaper modes of construction and management are adopted; and if, in the next twenty years, any thing like the same progress takes place, river navigation will be entirely abandoned, even for the heaviest and least valuable products, and the old father of waters will become, as some one has said, useful only to water cattle. Time is every thing—it is money. Who will use even your magnificent floating palaces, which keep us seven to ten days in the passage to New-Orleans, when, on the wings of the locomotive, at as cheap an expense, (for this can be done for \$15,) in thirty-six hours we may light upon that gay metropolis, transact our business, and be comfortably again on the way home? This, too, without danger. Why, gentlemen, our floating palaces are but floating *Etnas*. We sleep upon the crater which is belching forth the elements of dismay and death, and which, in a single instant, may hurl us and ours into eternity. The mortality of western steamers is frightful. We were as safe among the cannon of Buena Vista. On the northern railroads not one passenger in a million is killed—on the English, not one in five millions—on the German, not one in twenty millions; whilst on the western rivers, the average killed will almost be *one in every three thousand*! I would

almost take the bold ground, that more passengers have been destroyed in the last five years, from steamboat accidents of every sort in the west, than have been destroyed on all the railroads in the world from their first beginning up to the present moment.

Glorious, then, have been the results of this age of railroad improvement. In the period of only twenty years, nearly three thousand millions of dollars have been expended in the world in their construction—a sum twice as great as the value of the whole slave population of all the southern states together. The annual savings from industry, which it required to do this, amounts to \$140,000,000—equal to the whole foreign export nearly of all the native productions and wealth of our republic.

Gentlemen, if we were to add together all of these great works, and stretch them forward in a continuous line, it would have a length of 26,485 miles—more than sufficient to belt this great globe. What a glorious triumph is here of human art and industry! We have heard of the tap of the British drum being answered from British fortification to British fortification around the globe—of the Spanish empire, on which the sun never sets—of the car of progress, rolling onward through the world, carrying with it all nations and people. Here we have a more glorious realization than either. Stretch out the links of your magnificent railways. Start the locomotive. Vulcan has seized, as it were, the reins of the chariot of the sun, imitating the daring rashness of Phaëton of old. The blazing, burning, and restive steeds prance furious onward in their course—onward, and onward—yet in the check and control of the master charioteer. A speck upon the horizon, it roars and rushes on to become a speck on the opposite horizon. All nations, tongues, and kindreds look on and wonder, but the car rushes on with terrible and resistless energy. Thus, around and around this great globe revolves the "car of progress," carrying with it light, and life and civilization—warming up and animating the countless millions like the god of day himself in his eternal orbit. This, gentlemen, is the result of *human* skill, and enterprise, and energy! Truly may we exclaim in the language of Scripture, "God made man perfect, but they have sought out many inventions;" and I trust there will be no show of irreverence when I say of him, he has seized upon one of the attributes of Deity in this, that "he maketh the earth his footstool, and walks upon the wings of the wind."

RAILROAD COMMUNICATION BETWEEN THE ATLANTIC AND PACIFIC OCEANS.—PROGRESS OF AMERICAN POPULATION AND TERRITORIES; CALIFORNIA AND OREGON; PROJECTED COMMUNICATIONS ACROSS THE CONTINENT BY LAND AND WATER; PANAMA AND TEHUANTEPEC CANALS AND RAILROADS;

TRADE AND COMMERCE OF THE EAST; RAILROAD FROM TAMPICO AND NATECHÉ TO MAZATLÁN; FROM VERA CRUZ TO ACAPULCO; FROM GALVESTON TO SAN DIEGO; FROM ST. LOUIS TO SAN FRANCISCO; FROM MICHIGAN TO OREGON; FROM MEMPHIS TO SAN DIEGO; PROGRESS OF RAILROAD ENTERPRISE.*—From a period almost coeval with the first settlement of America, we find the idea of a connection between the two great oceans washing its eastern and western shores, by some safe and expeditious passage, either over the peninsula or through the interior of the continent, continually suggested, and receiving various degrees of consideration. The subject has assumed, in the present day, a new and higher degree of interest and importance, from the fact, so little to have been anticipated, that the American people, with the extraordinary energy of their democratic institutions, having filled up with a dense population all the earlier discovered and occupied territories, have, while yet scarce "hardened into manhood," swept across the "impassable" mountains, overspread the great valleys, and penetrated in immense numbers through the wildernesses of the Oregon, the Sacramento, and the Gila, to the very shores of the Pacific Ocean. The free and unconquerable spirit of the Puritan, the Cavalier, and the Huguenot, creates new revolutions in the regions of the setting sun.

But sixty years ago, when the first American census was taken, the main slope of the Appalachian Mountains was found to be the western barrier, confining nine tenths of the population within something like three hundred thousand square miles of territory. The four millions of inhabitants at that time registered, have swelled in this period to nearly twenty-three millions, and the three hundred thousand miles of inhabited territory to two millions of miles, excluding the late acquisitions of Oregon, California, and New-Mexico, embracing, by the estimation of the Land Office, eight hundred and sixty-seven thousand five hundred and forty-one additional square miles! Thus have we a people, blessed with freedom and enterprise, doubling in every generation their numbers, and occupying an empire three millions of square miles in extent—scarcely less than the whole of Europe, including Russia, and wanting one third only of the great Russian empire, extending from the Baltic, over three continents, to the western spurs of the Rocky Mountains. The sea-coasts alone of this enormous republic stretch out five thousand one hundred and twenty miles; or, if we follow the irregularities of the bays and islands, thirty-three thousand

and sixty-three miles—greater, by one third than the whole circuit of the earth!*

Frightful as have been the wastes to be crossed by this population, the "feet of men, and even children and tender women, have been beating out a track," over which the heavy wagon has rattled, among crags and rocks, in defiance of the vain obstacles of nature.

Most wonderful of all—in the depths of the valleys, and by the streams of the rivers they have crossed, has been discovered a region that realizes the fabled *El Dorado*, for which De Soto and Cortez and Raleigh so vainly sighed—possessing in its bowels illimitable treasures of virgin gold, so rich and rare, as to promise to labor, almost without effort untold wealth, and to the world a supply of the precious metals which shall exceed all that the "Orient Ind," in the days of Solomon or since, has yielded from its prolific bowels, or has been searched to where the "sunny fountains" of "old Afric"

"Roll down their golden sands."

Never in the history of mankind—not even when Columbus carried to Europe the tawny Indian, or when extravagant stories of the wealth of the Mexicans and of Peru were wafted across the ocean, or when the Crusaders were marching upon the East, or the "South Sea Bubble" or the "Mississippi Scheme" were at their height—never has been excitement wound up to a higher pitch, or expectancy been upon the keener alert. Men of all ages—of all arts, and pursuits, and professions, from all classes of society, even surrounded with the greatest comforts and highest allurements of home—have forgotten their legitimate avocations, thrown aside lucrative posts and callings as utterly worthless, and, braving the ocean for thousands and tens of thousands of miles, or inhospitable climes, and frightful journeys through trackless wildernesses, in handfuls or in vast cavalades, full of hope and enterprise, taken up their extraordinary pilgrimage to endure the fierce hardships of the *placers* of the Sacramento, and the mountain gorges, in their ceaseless search for gold! Wonderful, wonderful is this great passion for wealth, which, like a despot, rules over our wills and controls and masters our associations and affections, and breaks up, with remorseless strokes, every link and bond and sacred connection in life! God, by it, works out the DESTINIES OF MAN.†

* Report Coast Survey, under Prof. Bache, 1848.

† The Spaniards would appear to have been on this California gold track three centuries ago, but destiny reserved the prize for us. We quote from the "American Review."

"At the same period, also, while De Soto worked his weary way amidst the mountains and among the reedy marshes of the east, and the second Pizarro

* Prepared in 1849, when the question before the country was Whitney's road against a more southern and central one. Texas and Louisiana had not entered into competition for the route, though presenting claims of the very highest kind, as the reader will perceive in the sequel.

But we have not time for these reflections. It is now computed (1849) that the whole number of persons who have reached California, cannot vary far from twenty thousand,* and that those on the way, and to start, will, in a few months more, swell the aggregate to at least fifty or sixty thousand—sufficient to form a state government. What may be the future population of this region it is now impossible to argue; though, embracing, as it does, an area of five hundred and twenty-six thousand and seventy-eight square miles, if we give to it the average density of two to the square mile, the density of the Valley of the Mississippi as far back as 1810, when but few states had been formed, we would have one million of inhabitants; or, adopting the present density of Pennsylvania, there would be abundant room for twenty millions. A similar computation being made for Oregon, which has three hundred and forty-one thousand four hundred and sixty-three square miles, would give either seven hundred thousand or fifteen millions. It would not be an unreasonable calculation, we think, to estimate a population west of the Rocky Mountains, in the course of

one century from this, as large as the present population of the Union. There are causes at work to indicate this.

Three years ago, as if impelled by a vision of this western progress, so soon to receive the most powerful impetus, the people of the southwest and west repaired to Memphis in one great convention. We were a delegate to that body from South Carolina, and well remember the enthusiasm which was excited by the remark of her great statesman who presided on the occasion: "In less than one generation, the west will be engaged in deliberations to extend its connections with the Pacific, as it is now with the Atlantic, and that connection will be as intimate with the one as the other. In the end, we will command the commerce of both, and this great valley become the centre of the commerce of the world." Mr. Calhoun was right, though the shadows were cast more rapidly than even he could conceive. *The hour is already come!* A second great western convention is proposed, and delegates are again invited from wide-spread regions to Memphis, on the Fourth of July. The occasion is a fitting one for the investigation and discussion we now propose.

searched vainly for the *El Dorado* of the south, Vasquez Coronado was equally indefatigable in his search for the traditional golden cities and inexhaustible mines of New-Mexico and California. In common with De Soto and the South American explorers, he failed in the primary object of his expedition; failed, too, if we may fully credit the announced discoveries in California, when the coveted prize of his toil was almost within his grasp.

The expedition by Coronado was undertaken under an implicit belief in the existence of vast treasures in the regions north of Mexico, falling within the territories known as New-Mexico and California, and now constituting part of the republic of the United States. This belief was based upon accounts, somewhat vague, it is true, but all concurring in substance, and was universally entertained by the Spaniards of that day. The sea expedition on the Pacific, undertaken by Ullon in 1539, under the direction of Cortez, had for its object not less the discovery of the golden region of the north than the exploration of the coast. And when, in 1540, it was resolved to send northward a land expedition upon the same search, the right of command was contested between Cortez, as Captain General of New-Spain, and Mendoza, as Viceroy of Mexico. The latter was successful, and Cortez, disappointed and disgusted, returned to Spain. This incident will show how high were the anticipations which the Spaniards had formed of the riches of the Californian *El Dorado*. The documents of that period, which have been recovered from the rich historical depositories of Spain, present us with some singular illustrations of the extravagant notions then prevalent; and, although to a great extent proved by subsequent events to be unfounded, are, nevertheless, at this time not without their interest."

* The number which left the United States between December 14th and April 17th last, was, according to the *Herald*:

RECAPITULATION.

Total in 296 vessels, via Cape Horn.....	14,191
" 52 " " Chagres.....	3,544
" 11 " " Vera Cruz.....	698
" 11 " " Brazos.....	765
" 3 " " Corpus Christi.....	108
" 2 " " San Juan River.....	118
" 2 " " Tampico.....	87
" 1 " " Galveston.....	86
" 1 " " Lavaca.....	129
Total in 309 "	19,717

Until the late explorations conducted by Col. Fremont, very erroneous ideas have prevailed in regard to the character of the country to the westward of the Rocky Mountains. It was customary to denounce it a hopeless, sterile waste, where the arts of civilized men could never prevail. Imperfect as the explorations have been, the most fruitful and abundant regions have been already found, with the finest climates, forests and streams. Artificial irrigation is regarded practicable where these last have been wanting. We have the valley between the blue and far west mountains—the beautiful country of the Walla-Walla—the regions about the Columbia, from the straits of Fuca to the waters of the Umpqua—the much abused and little understood "Great Basin," where Fremont found a "rich alluvion soil"—the valleys of the Sacramento and San Joaquin—the country to the northward of the Bay of San Francisco, as well as toward Monterey—the valley of St. Joseph and to the southward of Point Conception—Monterey Bay, Los Angeles, &c., &c. "I read," says Mr. Benton, "to show that there is good country in the mountains; but I have more beautiful yet to show—the 'Three Parks,' unsurpassed by any thing in Switzerland, replete with all the beauty of the most picturesque parts of Switzerland, and without glaciers."

We believe that this whole region will eventually be one of flourishing empire. Its most unfavorable sites will not suffer in the comparison with some of the most inhospitable of prosperous New-England. The improvements in arts have made the desert and the wilderness bloom. As yet, imagination cannot even picture the treasures in gold and precious stones which are concealed among the moun

tains and through the beds of rivers. These must necessarily attract a large population, and build up villages and great cities. With a command of the precious metals, the inhabitants may have the command of commerce. The East is before them, at their very doors; that East which has furnished rich products from all antiquity, and held out golden visions of unlimited trade to all civilized nations; the East which built up Alexandria—which caused Venice to spring from the marshes of the Adriatic, and the “abodes of fishermen” to rival in splendor, pomp and magnificence, all the world had hitherto seen; the East that enriched the Portuguese, enabled the Dutch to compete for the sovereignty of the seas, and gave at last to their great rival across the channel, as it were, the very trident of Neptune himself. There is no fancy in this. Western America may have her high destiny too; and we, and all the world else, may seek to share it with her, by opening channels of frequent intercourse and communication.

Neither California nor Oregon are more distant from the seats of eastern commerce on the Pacific, than is Europe from our Atlantic coasts, yet already have we an annual commerce with Europe of about two hundred and fifty millions of dollars. Is not western America, in the progress of her history, capable of a similar trade by the Pacific? Her

ports and harbors, Fuca, San Francisco, Monterey, San Diego, if not all that could be desired, are at least sufficient.

Western America can compete with Europe in the eastern trade, being several months nearer—all experience showing that the amount of trade increases generally in a ratio with the facilities and rapidity of intercourse. She can compete with eastern America in this same trade for a similar reason. Admitting a dense and enterprising population beyond the mountains, these propositions cannot be disputed. The great question, however, occurs, and this will determine the whole matter, *Can western America herself be brought into connection with the Atlantic, and thus with Europe, so as to enable her to trade with the world in India products, on such terms as will secure the monopoly?* At present she has no such connection, but is isolated and alone, and must resort to the seas upon less advantage than eastern Asia. Shall she ever remain so?

Let us see what has been proposed since the earliest periods, to connect the shores and commerce of the American continent, and whether any plan is practicable, and which. The time has come to settle this question. But first it is well to determine what eastern America has to gain in the event of success, or in other and plainer language—*what is the value of eastern commerce?**

* Mr. T. Butler King, in his able report upon the Panama railroad, adverts to one great cause of British commercial supremacy, that “she not only has the ports of the continent of Europe as her neighbors, but she is *fifteen hundred miles*, or two weeks, nearer than we are to *all the other ports of the world, except the Atlantic ports of the American continent north of the equator and the West Indies*. He furnishes the following interesting table of distances to be saved by the Panama route:

PLACES.	New route from New-York.	Old route from New-York.	From Liverpool.
	Miles.	Miles.	Miles.
To Calcutta, via.....	18,400	Cape of Good Hope.....	17,500
		Cape Horn.....	23,000
		Isthmus of Panama.....	21,500
To Canton, via.....	10,600	Cape of Good Hope.....	19,500
		Cape Horn.....	21,500
		Isthmus of Panama.....	20,000
To Shanghai, via.....	10,400	Cape of Good Hope.....	20,000
		Cape Horn.....	22,000
		Isthmus of Panama.....	20,500
To Valparaiso, via.....	4,800	Cape Horn.....	12,900
		Isthmus of Panama.....	11,400
To Callao, via.....	8,500	Cape Horn.....	18,500
		Isthmus of Panama.....	12,000
To Guayaquil, via.....	2,800	Cape Horn.....	14,300
		Isthmus of Panama.....	12,800
To Panama, via.....	2,000	Cape Horn.....	16,000
		Isthmus of Panama.....	14,500
To San Blas, via.....	3,800	Cape Horn.....	17,800
		Isthmus of Panama.....	16,300
To Mazatlan, via.....	4,000	Cape Horn.....	18,000
		Isthmus of Panama.....	16,500
To San Diego, via.....	4,500	Cape Horn.....	18,500
		Isthmus of Panama.....	17,000
To San Francisco, via.....	5,000	Cape Horn.....	19,000
		Isthmus of Panama.....	17,500

When Venice conducted the commerce of the East, she supplied all the world with its products. The disadvantages of this trade were great, land carriage as well as sea, and various shipments and reshipments, yet the richness of the trade endured them all, and made her "Queen of cities—a new Tyre." The Byzantians had long before conducted the same trade by voyages up the Indus, overland communications to Oxus and down to the Caspian Sea, navigation to the Volga, transportation again across the country to the Tanais, thence to the Euxine, with a reshipment there. Precious indeed must be the trade which can flourish amid all these obstacles!

As facilities of intercourse with the East, however, increased after the discoveries of the Portuguese, Spanish, Dutch, and English, we find the European trade with Asia prodigiously augmented. In the best days of Venice (A. D. 1400) this trade did not exceed 20,000,000 ducats, or require above 600 ships of 600 tons each. Whereas, including America now, according to a report made to Congress, by Mr. Breese, and adding for increase since his dates, and value of ships engaged, the whole commerce of the East with all the world, annually, may be estimated at 300,000,000 of dollars, requiring 2,000 ships.

TABLE I.—Statement of the number of vessels, amount of tonnage and crews, which entered and cleared at the ports of the following countries from and to ports beyond the Cape of Good Hope and the Pacific.

	INWARD.			OUTWARD.		
	Ships.	Tonnage.	Men.	Ships.	Tonnage.	Men.
England, 1842.....	877	329,404	16,698	823	348,724	18,468
United States, 1845.....	329	111,180	6,998	367	125,582	8,305
France, 1833.....	117	36,040	2,048	117	36,040	2,038
Antwerp, 1839.....	7	2,860	125	1	272	12
Bremen, 1841.....	6	1,800	100			
Hamburg, 1841.....	10	5,000	200	10	5,000	200
Netherlands, 1840.....	188	97,231	5,150	221	113,862	5,625
Russia, with China, estimated from the commerce now overland, to require.....	50	25,000	1,000	50	25,000	1,000
Total.....	1,584	608,515	32,319	1,589	654,480	35,648

TABLE II.—Value of trade conducted by above shipping.

	IMPORTS.	EXPORTS.
Great Britain.....	\$85,527,120	\$59,187,185
France.....	16,310,295	8,238,050
Antwerp, no statistics, but estimated on number of ships.....	700,000	500,000
Hamburg, " " " ".....	500,000	400,000
Bremen, " " " ".....	610,000	400,000
The Netherlands.....	23,527,390	4,702,000
United States.....	11,438,408	5,443,828
United States from whale fishery, for 1845.		
157,700 bbls. sperm oil, @ 88.....	\$4,371,444	8,300,957
272,809 " whale oil, @ 33½.....	2,864,495	
3,195,054 lbs. bone, @ 33½.....	1,065,018	
	\$146,814,165	\$78,871,063
Add overland Russia with China.....	12,048,055	7,581,295
Total.....	\$158,862,220	\$86,452,358

The number of vessels employed in trade beyond the Cape of Good Hope is estimated at 2,000, of the value of \$60,000,000. Passengers to and from Bombay and England annually, about 4,000, paying from 5 to 900 dollars each, and occupying from 40 to 50 days.*

* This of course is by the overland route by Gibraltar, Alexandria, Cairo, Suez, the Red Sea, etc. In a late number of *Chambers's Miscellany* is described the route, thirty-nine or forty days, and the expense £120, \$600, from Southampton to Bombay.

Extra baggage \$15 per hundred pounds. English mails to Bombay and China \$2,000,000, making \$4,000,000 expended annually in passengers and mails to the East.

Now there can be little doubt that the trade with eastern countries is susceptible of almost unlimited extension, were their distance lessened one half, or two thirds, and the time of travel reduced in a similar proportion. Many new products would then endure transportation which are now too perishable

or bulky. The travel also would be increased. In truth there would be added millions and hundreds of millions of eastern consumers. The Sandwich Islands are but in their infancy. There are a million and one half Polynesian Islanders; Celebes contains 3 millions; and Java 5 or 6 millions, who export \$30,000,000 annually to Holland. Sumatra, with a population of 2,000,000, exports 30,000,000 pounds spices. Borneo, with 3 to 4 millions, exports gold, tin, antimony, and diamonds. The Philippines have 3,500,000, producing sugar, coffee, indigo, hemp. Singapore is the centre of Indian trade; India contains 184,000,000 inhabitants, including Cabul and Afghanistan, Calcutta, Bombay, Madras, Ceylon, etc., with a commerce of \$150,000,000 annually. Australia is an infant, but promising colony. Russian America, now unimportant, Manchoo Tartary, and the great Sanghalin river, 4,000 miles long, connecting with Pekin; Japan, with 50,000,000 people and the richest products, now almost closed to commerce; China, 360,000,000 inhabitants, on the coast 274,000,000, with its Chang-hee, or Shang hai, at the mouth of the mighty Yang-tsee-keang, 4,000 miles long, the Mississippi of China.

Can it be imagined that these vast regions, so densely populated, have already reached the acme of their foreign trade, or is it not plausible, when better systems of intercourse are opened, jealousies removed, and civilization extended, that trade with them will be augmented two or three fold, reaching, perhaps, in the aggregate, five to eight millions of dollars? Instead of two thousand travellers visiting the East, per annum, in such a contingency, would not the number reach nearer twenty thousand, which, at half the present rates of travel, would realize six or eight millions of dollars?

The question occurs again, how can we connect ourselves with the Pacific by a route so advantageous, in every respect, as will enable us to command, if not to monopolize, its commerce, and augment it in the manner indicated? And this brings us to a *historical consideration of the various projects, past and present, looking to a connection between the Atlantic and Pacific Oceans.*

In the search of a western and shorter passage to India, Columbus discovered the American continent, as the Portuguese had skirted along Africa and doubled the Cape for an eastern passage. The Portuguese rested in their brilliant discoveries, and in the wealth which they brought. Spain, on the contrary, still sought the nearer route, and explored the American continent in the hope of finding some strait or channel through it to India. She sought in vain in the extreme north; about the Isthmus of Panama; along the Mexican coasts, and throughout the extent of all South America; finding, however, the Straits of Magellan, and ultimately, though long af-

terward, Cape Horn. These were far from presenting the much desired advantage.

No sooner had Cortez been securely established in Mexico, than he commenced anew the search, with the greatest minuteness, throughout all the coast. He wrote to the emperor: "I have received information as well of the riches of the country, as that, in the opinion of many navigators, *there exists a strait leading to the opposite sea.*" He writes again: "Should we, with the Divine assistance, so hit upon this strait, that the navigation from the spice countries (the East Indies) to the kingdom of your majesty would become excellent and shorter, so much so that *it would be two thirds less than the present navigation*, and without any danger to the ships in going or coming," etc., etc.

The Spaniards appeared, at last, satisfied in this quarter, and sent out expeditions to northwest of America, in the hope of greater success there. In one of these was explored the Gulf of California, and in another Friar Marcos asserted the discovery of regions, which no one afterward could find, northwest of Mexico, beyond 35° of latitude, abounding in gold, silver, precious stones, and a civilized population!* The final conclusion was that no navigable passage existed south of the latitude of 40°, and soon, says Mr. Greenhow, the Spanish policy maintained, "the discovery of any passage, facilitating the entrance of European vessels into the Pacific, would be deleterious to the power and interest of Spain in the New World."<†

About the middle of the sixteenth century, a direct commerce was opened between the Spanish East India possessions and Mexico. For the first time Europeans crossed the Pacific in direct voyages from Asia to America. "Large ships, called galleons, sailed annually from Acapulco to Manila in the Philippines, and to Macao and China, laden with precious metals and European merchandise; in return for which they brought back silks, spices and porcelain, for consumption in America, or for transportation over the Atlantic to Europe; while an extensive trade, in articles equally valuable, was carried on between Panama and the various ports of Peru and Chili."

The English now appear upon the theatre; and, jealous of the lucrative branch of commerce which has sprung up, the buccaniers, under Drake and Cavendish, infest the waters of the western world. To this period may be traced the ingenious fictions of a passage to the northwest, *through the continent*, so long credited and known, even upon the maps, as the *Straits of Anian*, or of *Ruca*.

Between the years 1600 and 1760 the search was continued, with various interest, and resulted in the discovery of Baffin's Bay and

* Was this California?

† Vide Spark's *La Salle*.

Hudson's Straits. Near the close of the eighteenth century, the English, Spanish and American navigators made frequent expeditions to the northwest, and their respective discoveries became a question of keen and lively interest and discussion but lately, in the settlement of the *vezata questio* of Oregon. The English chapter exhibits the results of Alexander McKenzie, one of her citizens, who traversed British America, from Canada to the Pacific, being in search of an inland route across the continent.

The Sieur de la Salle entertained the idea, as his dispatches will show, that, by following the Mississippi to its sources, a communication could be had with the waters of the Oregon and the Pacific, and the commerce of the East commanded by France, through her province of Louisiana.*

Thomas Jefferson, two hundred years later, and soon after the Louisiana purchase, following the idea of La Salle, dispatched Lewis and Clarke on an expedition to the northwest, by the way of the Mississippi, to find, if possible, a route of commercial communication to the Pacific.†

So much, then, for the history of this interesting subject, and now for the various projects of our own day, toward the accomplishment of the same great end. They are either,

I. By CANAL, or

II. By RAILROAD.

Of each there are several routes proposed, with various degrees of merit, which it is our present purpose to examine. And first, as to canals. These are,

1. By the Isthmus of Panama, or Darien.
2. By the Lake of Nicaragua.
3. By the River Atrato, from the Gulf of Darien.
4. By the Isthmus of Tehuantepec.

Others, less practicable, were proposed by Humboldt, but we shall consider now only those of Panama, Nicaragua, and Tehuantepec.

1. PANAMA. This is the narrow neck of land connecting the two Americas; in the province of New Grenada; between the parallels of 8° and 11° north latitude; varying in breadth from twenty-eight to forty-eight miles, and with a population of 7,200. The Andes afford many gaps, or passages, and the country presents no insurmountable obstacles to a canal, which it is estimated may be built for \$40,000,000. The late conquest of California has given an interest to Panama, far greater than it has previously had. Lines of steamers constantly ply from northern ports to Chagres, on the Atlantic, and other lines from Panama, on the Pacific, to San Francisco and Oregon. Little difficulty is found by passengers over the isthmus, who are conveyed more than half the way in canoes. We have seen

the most glowing accounts of the expedition, the scenery and aspect of the country, even from the pens of delicate females. The rigors of the climate and the rainy season have been greatly exaggerated.

2. NICARAGUA. This lake is situated between 11° and 12° north latitude; its extent is large, and its navigable waters are carried to the Caribbean sea by the river San Juan—navigable during the rains, according to McCulloch, throughout its whole extent. Four to twelve feet water is always afforded in the Rio Juan, and it is proposed to improve its navigation, or to construct a canal from the Lake Nicaragua, which is adapted to ships of largest burthen, to the Pacific, fifteen and three fourths miles, through a country elevated, in general, not more than nineteen feet. The level of the lake is one hundred and thirty-four feet above the Pacific, and the difference in level between the two oceans is twenty or twenty-two feet. For a canal, there must be one mile of tunnel, and two miles of deep cutting through volcanic rock, and also a great number of locks. Mr. Bailey, under direction of the state of Nicaragua, made a survey in 1837-8, and estimated the cost of a canal at about \$30,000,000.

3. TEHUANTEPEC. The Rio Guasacualco has its mouth in the Mexican province of Vera Cruz, seven hundred miles from the mouth of the Mississippi river. The route across the isthmus follows the course of the river as far as Tarifa, at which town a canal or railroad will begin, passing into the western lakes which are discharged into the Pacific. The width of the isthmus in this part is one hundred and thirty-five miles, and its central mountainous chain exhibits a depression in the line of the route. For twenty-five miles a plain is formed, whose streams flow north and south. There are passes or gates here, such as Chivola and Tarifa. The northward streams enter the Guasacualco—the southern, the Chiapa, which is discharged in the lake east of Tehuantepec, on the Pacific. We have before us the survey and charts of Moro, appointed in 1832 surveyor under Garay, who had obtained the right of way from Mexico, for fifty years, and the property in all the lands for thirty miles on either side—the passage to be opened to all nations, and considered neutral ground. The Spanish engineer conceives the whole extent of the Guasacualco may be rendered navigable by artificial means, and without exorbitant cost. He proposes also to remove the bar on the Pacific entrance, and estimates the whole expense of the canal 85,000,000 francs—less than \$20,000,000.

The late Vice President, George M. Dallas, strongly advocated the Tehuantepec route, in an able and elaborate paper, and suggested the importance of a clause in the treaty of peace with Mexico, securing to us for ever the right of way. The Mexicans, it is understood,

* Vide Sparks' *La Salle*.

† Lewis and Clarke's Expedition, Vol. I.

would not listen to this: though it is likely, as they can never hope to make the improvement themselves, they would, upon some more suitable occasion, readily make the concession.

In regard to the canal communication it is difficult to pronounce an opinion. The Americans would never undertake it, we think, unless—which is hardly to be expected, at least for half a century—the territories were ours, or unless an overland communication across our present possessions were found impracticable. Would the British? And this, too, must depend upon the chances of our railroad, as above hinted at. If that succeeds, of course the Isthmus canal would be unnecessary, and we opine that one would require as long to build as the other. But this is anticipating. When the American continent becomes as densely populous as Europe, these, and many other connections, may all be in successful operation together.

Let us now pass to the various projected railroad routes across the continent. They are:

1. Across Panama—the Aspinwalls'.
2. Across Tehuantepec—Mr. Hargous'.
3. Tampico to Mazatlan.
4. Natchez to Mazatlan—Mr. Patterson's.
5. Galveston to San Diego—Gen. Houston's.
6. St. Louis to San Francisco—Mr. Benton's.*
7. Lake Michigan to Oregon and San Francisco—Mr. Whitney's.
8. Memphis to San Diego, Monterey, or San Francisco.

Of these, the first four are either wholly, or in part, through *foreign* territory, and the remainder entirely through our own. We take them in order.

1. PANAMA RAILROAD.—At the last session of Congress considerable excitement prevailed in regard to the proposition of Mr. Aspinwall and others to construct this road, on consideration of a contract from government, to carry the mails, troops, and government stores, for ten years, at \$250,000 per annum. The road to be guaranteed complete in three years, and to charge Americans no more than \$8 each, for passage, and \$8 per ton, freight. These rates to be reduced after the first five years to \$5 each, and three fourths of the road to be owned by citizens of the United States.

Able speeches were made in the Senate, by Messrs. Benton, Douglass, Clayton, Webster and Dayton, in advocacy of the scheme, and by Downs, Niles, Allen, Butler, Davis and

Foots, in opposition. We give some extracts from the debate, as possessing great interest.

Mr. Benton said: "It is therefore a temporary road for us—not temporary for other nations—but for us it is a temporary road across the Isthmus of Panama, as a step toward the accomplishment of this great design which Mr. Jefferson conceived, and for the accomplishment of which I have been collecting information and studying details for thirty years; and I intend at a proper time to bring in a bill, with those details, for commencing the location and construction of the road. With this explanation of my views of the projected route across the Isthmus of Panama, that we are to use as a temporary route, it will be seen that the first thing we have got to do is to go about it at once—to do it immediately, or the whole object is lost. I am for no permanent road outside of my country. I am for no permanent road for America, either across the Isthmus of Darien, Tehuantepec, or any where else. I am only for a temporary measure, with respect to any route, sir; but I take that one which can be got first, and which will answer our purposes better than any other. If we undertake to institute comparisons between different routes, even if we have a legal and political right to do so, why, sir, the very object for which I want a road outside of our country is lost. I want it, sir, directly. I want it for present use; and if we have to wait, why, sir, we may as well throw up the whole, and wait for our own. I have no idea, sir, of doing any thing permanent outside of our country—no idea of going into expenses, or bargains, or arrangements, which are to keep me outside of my own country one moment beyond the time that we are able to finish our road."

Mr. Webster said: "I have a strong disposition to think the measure is a proper one. The extraordinary circumstances of the country call for it. There is nothing in those circumstances likely to make them so short-lived and temporary, as that within a year or two, or any number of years, we may justly apprehend and consider that this work will not be necessary; and I repeat again, that if there were a proposition at the same time for the other work, if it were in as advanced a state as this, and we were to have but one, I should give the preference to the other; and I fully believe both are to be accomplished, and still other modes of communication are to be established across our own territory, without any occasion to enter the territories of other countries."

Mr. Clayton said: "This is to be an American road. It will have that character abroad, do what you may. American citizens are intrusted with the construction of it. Well, if this work is to be, and be called an American work, I desire that it should be a road worthy of the American name; and, in

* A memorial was presented, at last Congress, to carry the mail between these two points by express, on the part of W. A. Bradley, and others, and reported on by Mr. Bell and Senator Rusk.

We read, also, in the Railroad Journal, the memorial to Congress, of Bayard, praying aid in constructing a railroad from St. Louis, intersecting the Rio Grande, Red and Gila rivers; and one from Dennis Keenan, Jr., proposing a railroad and magnetic telegraph, from Point Isabel, Texas, to the Pacific. Truly is this an age of enterprise.

my opinion, the American government should, within its constitutional sphere, aid, as far as it can, individual enterprise in making a road worthy of the American character. I do not want a road attempted there by individuals and carried on by piecemeal, commencing with a railroad of a few miles, and perhaps ending for some years to come with a plank or a mule road. I desire that the improvement should go on continuously and in the shortest practicable time. And now allow me one general remark in regard to the sum to be expended. I would aid, as far as the constitutional power of the government will enable us to do it, in making a road from the Mississippi river to the Pacific, or a road across the Isthmus of Tehuantepec, as I design to aid in the construction of the road proposed by this bill; and whatever the cost of a passage by canal or railroad across to the Pacific on either isthmus may be, whether two millions, two and a half millions, six millions, twenty millions, or even fifty millions, I say, sir, that the wit of man cannot find any other mode of expending the same amount of money as much for the benefit of this country and of the whole human family. And I repeat that I do think that, in the middle of the nineteenth century, it is a disgrace to the government that nothing has yet been attempted with success to save our commerce the dangerous navigation of nine thousand miles around the cape. I take the proposition now before us because it is practicable. I would not delay the work from year to year and from day to day. If we can, by expending the sum of two and a half millions of dollars, or less, accomplish so great an object, I say, for one, that I am willing to authorize the expenditure."

The objections to the bill were strongly urged—that it was a contribution *indirectly* for internal improvements; that the monopoly would be in violation of the treaty with Grenada, making the passage *free*; that the amount to be paid by government would itself build the road; that the consideration offered by the company was inadequate; that it would be unfortunate for the government to be bound down so long a time to a route far beyond our own country; that the steamers to Chagres must enter the Caribbean, an enemy's sea, perhaps, and have their coal depots at Jamaica; that it is far less desirable, and not more practicable, than the Tehuantepec route, &c., &c.*

Mr. Underwood said: "Now, sir, I have given you these speculations and these data, and if there be any thing in them at all, it is

very manifest that it is to be the most profitable route for the investment of capital on the face of the earth. There is to be nothing like it. It is to transcend every other railroad that has been constructed. And what, then, are you doing? It is a contribution on the part of the government—a departure from all the principles of the constitution—to make millionaires of the members of this company. That, sir, is your bill. I believe it was suggested that it was an extra-territorial improvement. So much the worse for me; so much the better for my argument, but worse for my feelings. I want to improve my own country. I want to make a railroad—one or two, if you please—across the valley of the Mississippi to the Pacific; but I want it in our own country, if I can get it. I will not object to this, if you will place it on a basis by which I can see that we get an equivalent for the money which we pay; but I will not give a cent—I am too democratic for that—by way of exclusive privileges to a favored few. With the views I have taken of this matter, based on the figures which I have read, and looking at what the government will give under this act, and what individuals must pay, it must be the most profitable investment on the face of the earth. To this bill, then, sir, I am altogether opposed. I am further opposed to it, because we have not the data upon which to act, and because I believe that this thing has taken a step which it should not have taken."

2. TEHUANTEPEC RAILROAD.—This was a proposition of Mr. Hargous, of New-York, who has a grant for fifty years from Mexico to build the road—that Republic to impose no taxes upon travellers or imposts, to allow foreigners to acquire real estate and exercise all trades, except mining, for fifty leagues on either side of the road. But we adopt the words of the memorial:

"From these surveys it is established that the entire distance from sea to sea is one hundred and thirty-five miles, in a straight line, and presents a wide plain from the mouth of the Guasacualco to the port of the Meza de Tarifa, a table or elevated plain on the line of the Andes, which rises to the height of six hundred and fifty feet above the level of the sea, and at the distance of five miles again descends to a plain which reaches the Pacific. The summit level to be overcome is only six hundred and fifty feet. Thirty miles of the river Coatzacoalcos are navigable for ships of the largest class, and fifteen miles beyond this for vessels of light draught, leaving only about one hundred and fifteen miles of railroad to be made. It would occupy too much space to enumerate all the details of these surveys, and which go to show so strongly how easily a railroad can be constructed across the Isthmus of Tehuantepec. It is sufficient to say that the abso-

* It was understood that this was a mere question of time, and the Aspinwalls would build the road in ten years, whether they had the government contract or not.

lute practicability has been clearly ascertained.'

"In other respects it affords great facilities for construction. 'The entire course of the Guasacualco is bounded by forests, which can supply immense quantities of the proper kind of timber suitable for the construction of a railroad, and all of which is, by the terms of the grant, the property of the company undertaking the construction of the road. Limestone, strong clay, asphaltum, and building stone of the best quality, suitable for bridges where necessary, are placed as if purposely by nature, all along the direction of this route. The Zapotecs and other Indians can be found in quite sufficient numbers to carry on the work, and at those points where foreign labor is indispensable, the temperature is such as to allow them to pursue their labor without either inconvenience or injury to their health. The climate, though warm, is healthy. The natives are mild, submissive and tractable. There are ample sources whence to obtain a stock of domestic animals and beasts of burden. Throughout the whole line secured by the grant, as well for the purposes of a communication across the isthmus as for the settlement of the country by foreigners, all the productions of the equatorial and temperate regions are found in the greatest abundance; for the valley of the isthmus produces the former, and on ascending to the more elevated country bordering on the valley, the climate of the temperate zone is found there, as well as its productions. At each end of the railroad are suitable places for fine harbors, as well as to depth, size, and security from storms. It is true, there is a bar at the mouth of the Guasacualco. By different navigators the water has been sounded, and from twelve to eighteen feet have been found on it at low water. Commodore Perry, in his survey in 1847, found twelve feet. At a small pass at the entrance of the ocean, on the Pacific side, there is at low water seven feet. Your petitioner, however, is convinced, from the character of the obstructions, that they can, at a small expense of time and money, be removed easily, and will then open an entrance for vessels of large size into ports equal to any in the world. He is prepared to show this to the satisfaction of your honorable body.

"Such are some of the physical advantages connected with this route. There are others, however, no less important. The distance from the mouth of the Mississippi to San Francisco by the Isthmus of Tehuantepec is 3,294 miles, by the Isthmus of Panama 5,000—thus showing that the route by the Isthmus of Tehuantepec is 1,706 miles shorter than by Panama. The distance from New-York by the Isthmus of Tehuantepec is 4,744 miles, by the Isthmus of Panama 5,858—making the route by Tehuantepec from New-York to San Francisco 1,104 miles shorter than by the Isthmus of Panama."

Mr. Foote offered the following remarks and table: "From New-York to Chagres and the mouth of the Guasacualco river, the distance will be about the same for steam vessels; but that for sail vessels, the route to Chagres is much the longest, as a vessel might have to go outside of Cuba, St. Domingo, and Jamaica, in order to get into the current controlled by the trade winds; that the Panama route strikes the Pacific ocean some twelve hundred miles (more or less) more distant from California than the terminus on the Pacific of the Tehuantepec route; that the Tehuantepec route passes through a healthy country, whilst the Panama route traverses a region confessedly more sickly than any in North America besides; that from New-Orleans it is 650 miles further to Chagres than to Guasacualco; that the marine route to the eastern terminus of the Tehuantepec route is altogether in the Gulf of Mexico, whereas the Chagres route is outside of all the West India islands (a highly important consideration in time of war); that the soundings on the bar at Guasacualco are, according to the highest authority, at most seasons of the year, from 18 to 20 feet, and never lower than 12 feet 8 inches, with a tide of two feet; that distinguished English engineers have reported that \$3,000,000 will be necessary to make a safe and convenient port at Tamon bay; that at Panama, vessels cannot approach nearer than three miles, and a pier will have to be constructed about that distance; whereas, at Boca Barra, where the Tehuantepec route is to terminate on the Pacific, there is a fine port; and, finally, that the following table (which I request to be read) may be fully relied on in all respects:

VOYAGE.			
	Distance in nautical miles.	Distance via the Isthmus of Tehuantepec.	Difference saved.
New-York to Boca Barra, round Cape Horn, crossing the line in long. 26° W., Rio Janeiro, Valparaiso, Callao, and Boca Barra.....	12,390	3,820	9,060
New-York to Canton, by the Atlantic and Indian oceans, crossing the line in long. 26° W., going to lat. 41° S., and eastward to long. of St. Paul's, and thence by the straits of Sunda.....	15,540	11,950	3,590
New-Orleans to Boca Barra, round Cape Horn, to St. Thomas, Rio Janeiro, Valparaiso, Callao, and Boca Barra.....	12,510	900	11,610
New-Orleans to Columbia river, round Cape Horn.....	14,830	3,220	11,610
New-Orleans to Columbia river, inland journey up the Mississippi, up the Missouri, and across the Rocky Mountains....	3,400	3,220	180
[Note.—This has a land journey of 900 miles, full of difficulties.]			
New-York to the Columbia river.....	—	5,650	

Mr. Dayton, in opposition to the road, read a letter from Col. Abert, of the Topographical Engineers, and from Lieut. Maury. We extract first from Col. Abert:

"It is supposed that the railroad of this route will pass through Chevela as its summit pass, about 700 feet above the ocean on either side. The communication with the Pacific on the southern side is by means of two small lakes called the Upper and Lower lake. The railroad landing will, probably, be on the Upper lake, and the developed length of the road from the landing to Chevela will not, I think, be less than thirty-five miles. The northern terminus of the road, at a point where the navigation of the Gulf of Mexico ceases, will be at the lower end of Tacamichapa island, an island of the Guasacualco river. A straight or air line cannot be taken as a line for the length of the road, which must of necessity deviate from such a line and occupy the valley of the principal streams.

"From information derived from those much interested in this route, I am induced to believe that a railroad can be located between Chevela and the point on the Guasacualco before designated of not less than 120 miles. This would make the whole road 155 miles long.

"From the surveys of our navy, when on duty in the gulf during the late war, twelve feet water was found over the Guasacualco bar, and it is also said that at times this depth is increased to fourteen feet.

"During the season of northers, it is represented as a dangerous, if not impassable bar, rarely approached during that season, as the adjacent coast affords no adequate shelter. The harbor on the gulf side is the Guasacu-

alco river, a safe and good harbor after the bar is passed.

"The harbor on the Pacific side is the lakes or lagoons before described; for Tehuantepec bay is an open roadstead, without protection or shelter of any kind, and this bay is represented as being liable to frequent and violent tempests. The entrance to these lagoons is through a narrow passage between the lower lagoon and the Pacific, called the Boca Barra. It cannot be made by sailing vessels with an adverse wind, nor by steamers, under such circumstances, without great difficulty and danger. The inside of Boca Barra is closed by a bar, over which not more than eight feet of water has been found.

"This route being 155 miles (of railroad), if it be supposed to cost as much as the Panama route (and I do not see how it can cost less), the total cost will be \$12,913,900."

The total length of the Tehuantepec route can be stated as follows:

155 miles of railroad.

15 of water, through the two lakes to the Pacific.

30 (about) of river navigation, from the foot of Tacamichapa island to the Gulf of Mexico.

200 miles.

Lieut. Maury remarks: "There is now in the course of publication at this office a chart of the mouth and bar of the Guasacualco, from a very accurate survey made by Lieut. Leigh, by order of Commodore Perry, in 1848. It appears by that, that there is not more than 12½ feet water on the bar at the mouth of that river.

"I would here remark that there is in this office also a manuscript copy of Cayetano Moro's survey of the Isthmus of Tehuantepec,

under the Garay grant. The original, from which this copy was taken, was found by Commodore Mackenzie at Mina-titlan in 1847, in possession of one of the assistants on that survey, and the copy here was made by Lieut. May, by order of Commodore Perry.

"The surveys by our own officers differ so widely, and in such essential particulars, from the Moro survey, that they discredit it in some of its most important features, and show it to be unworthy of confidence.

"Lieut. Leigh's soundings I know to be correct. His chart was constructed in this office with a great deal of care, and his notebooks are here on file for reference. Lieut. Leigh makes but 12½ feet on the bar, Cayetano Moro 6.2 metres, or 20½ feet English.

"Thinking that there might be some mistake in the matter, which Commodore Perry could explain, I referred the Moro survey to him, and called his attention to this discrepancy as to the depth of water on the bar—a vital feature in the advantages of the route. By letter of the 25th ultimo he replies with regard to the Moro map: 'I notice on a side sketch of the bar the shallowest water marked at 6.2 metres. This is certainly wrong, as I have crossed the bar several times myself, sounding both ways, and the average depth in the channel has not exceeded 12½ feet. With regard to the depth of water on the Pacific side, it is not more, however, than six or eight feet. I do not find the Boca Barra recognized by any chart or book as a harbor or port into which vessels may enter. Ventoza is an open roadstead about twenty miles west of Boca Barra; it is without shelter, and vessels are driven out to sea by every gale at a moment's warning.'

"The following table shows the shortest navigable route in nautical miles, upon arcs of great circles, from New-York to the mouth of the Guasacualco and Navy Bay, also from New-Orleans to the same places:

	Guasacualco.	Navy Bay.*
New-York, via Hole in the Wall.....	1,800	
" south side Cuba.....	2,870	1,920
New-Orleans.....	800	1,450

"On account of winds and currents, the average time under canvas, from New-York, is rather less to Navy Bay than to Guasacualco by either route."[†]

3. TAMPICO AND MAZATLAN RAILROAD.—We have merely seen this suggested, and believe no survey has been made. The distance would not exceed seven hundred miles. Mexico, it is not likely, will ever have the means of constructing such a road across her

territories. A far better road is, however, proposed by the Mexicans, from Vera Cruz to Acapulco, passing through Jalapa, Cordova, Puebla, Cuernavaca and Mexico; the entire mule route being, according to the common itineraries, from Vera Cruz to Mexico, 252 miles, from Mexico to Acapulco, 270 miles—in all, 522 miles. A greater difficulty than the length, however, is the immense height which has to be ascended and descended in the passage between the two seas. Mexico is a vast mountain ridge, or plateau, wide at the north, narrowing rapidly at the south, but still preserving throughout its general height, which averages between seven and eight thousand feet, or about one mile and a half in perpendicular altitude. The city of Mexico itself is no less than some seven thousand six hundred feet above the sea. Nor is this the worst; for from this mountain ridge rise the minor ridges, or chains of mountains, half as high again almost, which require to be climbed. Thus, between the valley of Mexico and the Gulf, is the ridge of Rio Frio, upwards of ten thousand feet high; and on the west, that of El Marques, of about the same altitude. Doubtless, lower depressions in these ridges might be found; but no engineer would think lightly of the task of locating a working railroad, free from planes and tunnels through mountains of solid porphyry, over such a country as central Mexico.*

4. NATCHEZ AND MAZATLAN RAILROAD.—This route has been advocated by Mr. Patterson, of Louisiana, Colonel Gadsden, of South Carolina, and Professor Forshay. In his report to the South Carolina Railroad Company, in 1846, Colonel Gadsden says: "In connection with their Atlantic communications with Vicksburg, Grand Gulf and Natchez, crossing the Mississippi at one or all of these points, roads are already projected looking further to the west, which, uniting on a common trunk, in the rapid progress of southwestern extension and emigration, will in time be made to course through the newly acquired territory of Texas, and by the Mexican provinces, to a terminus at Mazatlan in the Bay of California; or, taking a more northern direction, by the valley of the Red and Arkansas rivers, may easily pass by the southern gorges in the Stony Mountains, and find, in the course of events, certain though slow, a more imposing location in the Bay of San Francisco on the Pacific." Colonel Gadsden published at the same time a map of the route.

In July, 1848, Mr. Forshay published in our Review a paper upon this railroad and a map, entering into many interesting particulars and details. The distances and expenses he assumes as follows:

* Near the Isthmus of Darien and forty-four miles from Panama, by sea.

† See the latest information and surveys upon this subject in De Bow's Review, vol. xiii., July, 1862.

* New-York Courier and Enquirer.

	Miles.	
Natchez to Trinity.....	26	Level.
Trinity to Alexandria....	54	Level—one grade twenty feet per mile.
Alexandria to Cotile.....	20	Level without obstacle.
Cotile to Sabine.....	50	Undulating, some hills and rocks—170 miles, \$1,500,000 cost.
Sabine to San Antonio....	400	Undulating gently.
Antonio to Rio Grande....	150	“ “ —550 miles, \$5,500,000.
Rio Grande to Mountains..	100	One hill, not steep.
Mountains to Hot Springs..	20	Hilly between mountains.
Hot Springs to Monclova..	50	Hills, but no rocks—170 miles, \$2,200,000.
Monclova to Bazan.....	30	Between mountains.
Bazan to La Joya.....	14	Calcareous, dusty roads.
La Joya to Veneditto....	84	Same—no water—easy pass, &c.
Veneditto to Sanceda....	22	Barren—Sanceda, finely cultivated road between mountains.
Sanceda to Jarrol.....	16	Road rough and broken, no mountains—cultivated valley.
Jarrol to Pastora.....	16	Dry, barren, but not rugged.
Pastora to Tenago.....	8	
Tenago to Cienaga.....	20	Rough and difficult.
Cienaga to Obaya.....	18	Splendid valley.
Obaya to Parras.....	5	“ “ —181 miles, \$2,800,000 cost.
Parras to Durango.....	220	Table lands.
Durango to Rosario River..	70	Mountainous.
Rosario to Mazatlan.....	130	Along the river—420 miles, \$10,000,000.
		Grand total, 1,491 miles, \$22,000,000 cost.

In dismissing these roads through *Mexican* territory, we may be allowed to express our strong preference for that by the way of Natchez, through Texas. New-Orleans and the southwest would be greatly benefited by its construction. Our preferences, however, will readily yield, if some other point on the Mississippi, not greatly more distant, and passing *altogether* through *our own* territories, can be suggested. We are sure the enlightenment of the southwest will understand and act upon this principle when they assemble in convention.

5. GALVESTON AND SAN DIEGO RAILROAD.—We believe this is advocated by Gen. Houston, and was proposed by a public meeting in Texas. The route runs from Galveston Bay northwest, to 32° latitude; thence westward, crossing the Rio Grande above El Paso; thence along the Gila valley to the Colorado, &c., &c. Length estimated at twelve hundred miles, though, by *our* computation, it cannot fall short of fourteen hundred miles. It will be remembered that the Santa Fe expedition, in 1841, took the route from Austin across the valleys of the Colorado and the Brazos, due north to the latitude 32½, or what is called the *Cross Timbers*; thence between the valleys of the Red and Brazos rivers, west to 101° longitude; thence northwest to the Colorado, and passing through the Angosturas to San Miguel. We suppose this route was adopted from its supplies of water, and to avoid the Comanche Indians. Whatever advantage, it occurs to us, in distance, a road across from the sea-coast of Texas might possess, and that would not be considerable, it is attended with the great *disadvantage* of being too far southward in its Atlantic terminus to be central or to interest any number

of states. A work so stupendous must be the common work of America, and for this it ought, as nearly as possible, to be *central*. Besides, the harbors in Texas have not sufficient capacity or depth for extensive commerce in the largest class of shipping. Texas herself, as well as Louisiana, would readily yield her claims in favor of any better projection.

6. ST. LOUIS AND SAN FRANCISCO ROAD.—This was proposed, at the last session of Congress, by the Hon. Thomas Benton. The provisions of the bill were, that three fourths in value of California and Oregon land sales, and one half of all other land sales, be appropriated by Congress for the construction of the road, with a branch to the Columbia river; where the railroad is not practicable, macadamized road to be used; track of one mile breadth from the Missouri frontier to San Francisco, to be reserved for this road and other roads; track of one thousand feet width to the Columbia; road to be built under directions of the President of the United States; road, when completed, to be let out by contract, by government, &c., &c. In defense of this stupendous enterprise, after quoting from Gibbon to prove that the Romans had greater ones, Mr. Benton thus eloquently concludes:

“Such was the extent and solidity of the Roman roads—a single line of road above four thousand Roman, and equal to three thousand seven hundred and forty English miles—and the four thousand cities of the empire all connected with roads of equal solidity besides. The road which we propose is only half the length of one chain of theirs. I mention them for their magnificence—their grandeur—and as presenting an example worthy of our imitation. The road I propose

is necessary to us, and now. We want it now. The state of our possessions on the Pacific demands it. The time to begin has arrived. All the necessary information is on hand. The means are ready. The title to Oregon is settled, and a government established there, and population is growing up. California is acquired; people are there: and a government must follow. We have a fleet on that coast—troops there and going. Streams of population are concentrating there. Since the discovery of the New World by Columbus, there has not been such an unsettling of the foundations of society. Not merely individuals and companies, but communities and nations are in commotion, all bound to the setting sun—to the gilded horizon of western America. For want of an American road, they seek foreign routes, far round, by sea and land, to reach by an immense circuit what is a part of their own land. Until we can get a road of our own, we must use and support a foreign route; but that is a temporary resource, demanded by the exigency of the times, and until we can get our own ready. Never did so great an object present itself to the acceptance of a nation. We own the country from sea to sea—from the Atlantic to the Pacific—and upon a breadth equal to the length of the Mississippi—and embracing the whole temperate zone. Three thousand miles across, and half that breadth, is the magnificent parallelogram of our domain. We can run a national central road, through and through, the whole distance, under our flag and under our laws. Military reasons require us to make it: for troops and munitions must go there. Political reasons require us to make it: it will be a chain of union between the Atlantic and Mississippi states. Commercial reasons demand it from us: and here I touch a boundless field, dazzling and bewildering the imagination from its vastness and importance. The trade of the Pacific ocean, of the western coast of North America, and of eastern Asia, will all take its track; and not only for ourselves, but for posterity. That trade of India which has been shifting its channels from the time of the Phœnicians to the present, is destined to shift once more, and to realize the grand idea of Columbus. The American road to India will also become the European track to that region. The European merchant, as well as the American, will fly across our continent on a straight line to China. The rich commerce of Asia will flow through our centre. And where has that commerce ever flowed without carrying wealth and dominion with it? Look at its ancient channels, and the cities which it raised into kingdoms, and the populations which upon its treasures became resplendent in science, learning, and the arts. Tyre, Sidon, Balbec, Palmyra, Alexandria, among its ancient emporiums, attest the power of this

commerce to enrich, to aggrandize, and to enlighten nations. Constantinople, in the middle ages, and in the time of the crusades, was the wonder of western Europe; and all because she was then a thoroughfare of Asiatic commerce. Genoa and Venice, mere cities, in later time, became the match of kingdoms, and the envy of the kings, from the mere divided streams of this trade of which they became the thoroughfare. Lisbon had her great day, and Portugal her preëminence during the little while that the discovery of the Cape of Good Hope put her in communication with the East. Amsterdam, the city of a little territory rescued from the sea, and the seven United Provinces, not equal in extent to one of our lesser states, became great in arms, in letters, in wealth, and in power; and all upon the East India trade. And London, what makes her the commercial mistress of the world—what makes an island, no larger than one of our first class states, the mistress of possessions in the four quarters of the globe—a match for half of Europe—and dominant in Asia? What makes all this, or contributes most to make it, but this same Asiatic trade? In no instance has it failed to carry the nation or the people which possessed it to the highest pinnacle of wealth and power, and with it the highest attainments of letters, arts, and sciences. And so will it continue to be. An American road to India, through the heart of our country, will revive upon its line all the wonders of which we have read—and eclipse them. The western wilderness, from the Pacific to the Mississippi, will start into life under its touch. A long line of cities will grow up. Existing cities will take a new start. The state of the world calls for a new road to India, and it is our destiny to give it—the last and greatest. Let us act up to the greatness of the occasion, and show ourselves worthy of the extraordinary circumstances in which we are placed, by securing, while we can, an American road to India—central and national—for ourselves and our posterity—now, and hereafter, for thousands of years to come.”

7. WHITNEY'S RAILROAD.—The enterprising gentleman at the head of this has, for four or five years, given it almost exclusive attention, and has perhaps more than any other man in the country illustrated the importance of a connection with the Pacific. He has explored personally a short portion of the route, and visited nearly every state in the Union, to induce their legislatures to coöperate. In this manner his outlay must have been very considerable. His proposition is to construct the road as a *private* enterprise, in consideration of a grant from Congress of thirty miles on each side of the road, from its *eastern* terminus at Lake Michigan to the *western* at the mouth of the Columbia, or at Puget's Sound, which is entered from the Straits of Fuca.

Latterly, he has proposed a branch to the Bay of San Francisco. The sale of the lands, it is argued, will build the road in a period of about twenty years. The road after a certain period is to revert to the government.

The route projects from Lake Michigan, striking the Mississippi above the mouth of the Wisconsin, and six hundred and fifty miles above St. Louis; thence to the South Pass, 42°, and through the Columbia valley by Lewis's branch to the ocean. The Pass is seven thousand nine hundred and forty feet above the level of the Gulf. The mouth of the Kansas, on the route, is elevated seven hundred feet. In the next five hundred miles, an elevation of two thousand three hundred feet more must be attained, to Republican Fork; in the next one hundred and twenty-eight miles, the elevation climbed is one thousand and four feet; in the next one hundred and seven miles, nine hundred and sixty-three feet; in the next eighty miles, one thousand two hundred and eighty feet; the next eighteen miles, seven hundred and fifty feet, or forty-two feet to the mile; the next eighty-nine miles to the Pass, two hundred and twenty-seven feet. We question if this road to the mountains be as good as those projected to the southward.

ESTIMATED COST OF ROAD.

Grading, bridging, &c., except bridges across the Mississippi and Missouri rivers, for 2,630 miles, at \$5,000.....	\$13,150,000
Bridges across Mississippi and Missouri.....	800,000
Superstructure, single track, depots, turn-outs, &c., 2,730 miles, at \$10,500.....	28,000,000
Engines, cars, &c., &c.....	10,276,600
Contingencies.....	2,000,000
Repairs upon road until completed and before it can earsup-port.....	15,000,000
Total cost.....	\$69,226,600

TIME OF TRAVEL.

From England to New-York..... 10 days.

From New-York to Pacific, 3,000 miles by railroad..... 5 days.
From Pacific coast to Chang-hai, the heart of Chinese commerce, 5,400 miles..... 16 "

Total (in place of present sea voyages four and five months)..... 31 "

From New-York to Australia..... 31 days.
" " " Manilla..... 24 "
" " " Java..... 25 "
" " " Singapore..... 27 "
" " " Calcutta..... 29 "

In reply to an attack from Professor Forshay, Mr. Whitney, in our Review for October, 1847, stated that a canal through the Nicaragua would save but four hundred and twenty-two miles in the passage from London to Valparaíso, whilst to Sidney there would be one thousand miles lost; to Canton, six hundred and eighteen; to Singapore, two thousand two hundred and twenty-eight, in comparison with present ship routes. He maintains that no southern pass exists in the mountain less than twelve thousand feet, (clearly a great mistake;) that a southern road to the Pacific must pass through soft bottom lands, over great streams, and countries subject to overflow, bad climates, &c. None of which is true, for some of the southern routes proposed, in any greater degree than for his own route. His objections to the navigation of the Ohio are well raised, if that river must be adopted as part of the line of travel; but this would not be necessary in a southern route. His position that Charleston is nearer to China by his route than by a more central or southern one, is not fairly stated, since his own figures give—

Charleston to Pacific—Whitney's route, 2,919
" " Southern route. . . 2,261

Less distance..... 658
And this saving of six hundred and fifty-eight miles in length of railroad travel, will compensate for much more than the loss in steamship navigation upon the Pacific. Subject to this objection, we furnish his tabular estimates:

TABLE of distances from principal Atlantic cities, &c., to Charleston, Vicksburg, Mazatlan, and to China, by the Southern route; also from Prairie du Chien, near the Mississippi, to Oregon, &c., &c., by the Northern route, with amount of differences, &c.

FROM	Southern Route.				Northern Route.			Diff. to Pacific.		
	To Charleston.	To Vicksburg.	To Mazatlan.	To China.	To Du Chien.	To Oregon.	To China.	Favor S. Route.	Favor N. Route.	Diff. to China in favor N. route.
Charleston.....		771	2,261	10,661	1,097	2,912	8,319	658		2,342
Richmond.....	427	1,198	2,688	11,085	950	2,779	8,172	84		2,917
Washington.....	554	1,325	2,815	11,215	988	2,810	8,210		5	3,005
Baltimore.....	594	1,365	2,855	11,255	948	2,770	8,170		85	3,085
Philadelphia.....	709	1,480	2,970	11,770	1,041	2,863	8,263		107	3,570
New-York.....	796	1,567	3,057	11,457	1,141	2,963	8,363		94	3,094
Boston.....	996	1,767	3,257	11,657	1,341	3,163	8,563		94	3,094
New-Orleans.....		415	1,905	10,305	830	2,652	8,052	747		2,257
Louisville.....		1,001	2,491	10,891	430	2,252	7,652		239	3,239
Cincinnati.....		1,132	2,622	11,022	450	2,272	7,672		350	3,350
Wheeling.....		1,496	2,986	11,386	560	2,382	7,782		604	3,604
Pittsburg.....		1,588	3,078	11,478	610	2,432	7,832		646	3,646
Cleveland.....		1,732	3,223	11,622	517	2,339	7,739		883	3,883
Buffalo.....		1,863	3,353	11,755	803	2,625	8,025		728	3,730
Detroit.....		1,425	2,915	11,315	486	2,308	7,708		605	3,607
St. Louis.....		803	2,293	10,693	300	2,122	7,522	...	171	3,171
Alton.....		826	2,316	10,716	275	2,097	7,497		219	3,209
Galena.....		1,208	2,698	11,098	60	1,882	7,282		816	3,816
Chicago.....		1,070	2,560	10,960	210	2,032	7,432		528	3,523
Prairie du Chien....		1,279	2,761	11,161		1,822	7,222		939	3,939

Mr. Whitney introduces testimony to prove the snows on his route are unimportant, prevail to but little depth, not every year, are dry and do not stand long; no greater cold than in New-England, and no greater obstructions than upon the roads there. He argues that a southern route must necessarily earn dividends, (a *non sequitur* always,) and charge a rate of freight one cent per ton the mile against his *half cent*. Upon his estimates of one cent and half a cent is constructed a table,* which we have not space to give, but which shows a rate of freight varying from twenty-three to fifty-three dollars a ton to China, according to the route and the point of departure, or from one to two dollars the hundred weight.

8. MEMPHIS RAILROAD.—By this we mean the road which our fellow-citizens of Tennessee and Arkansas are now advocating, and which they propose to submit to a convention of the southwestern states. The road would leave the Arkansas shore, opposite Memphis, and

strike across the country, perhaps to Van Buren, with branches to Little Rock, &c. From here it would follow the valley of the Arkansas river* and into the Indian territory along the Canadian branch of the same river. Having left the valley of the Canadian, the route would be almost due west to Santa Fe, should there be found a mountain pass that will answer, which is nearly in the same parallel of latitude as Memphis. We know with no exactness the distance from Memphis to Santa Fe, but suppose it would not exceed nine hundred miles, as there is little detour, which is about the distance between Santa Fe and St. Louis. Explorations upon this route, with the view of a railroad, have not yet been made, though the expeditions of Mr Gregg and others have given us many interesting particulars.

From Santa Fe the route would be down the valley of the Del Norte, following to some extent, perhaps, that pursued by General Kearney, and described by Major Emory, which crosses somewhere about the parallel of 34° latitude to the valley of the Gila, pursu-

* Mr. Whitney's objections to Mazatlan as a terminus have greater weight than they could have to San Diego or Francisco. The sailing time from these ports would be somewhat longer than from Columbia river, (the coal depots need not be in Oregon,) but this would be counterbalanced by other advantages.

* The inundated lands of Arkansas, five millions of acres, according to Mr. Borland's report in the United States Senate, one seventh of the state, can be readily reclaimed.

ing that river to the Colorado, near its mouth in the Californian Gulf, and thence across the country to San Diego.* The distance between Santa Fe and San Diego by the route indicated is also about nine hundred miles, making the whole distance from Memphis to the Pacific ocean *eighteen hundred miles*. Should San Francisco or Monterey be selected as the western terminus, the distance would be greater, and would be measured to some extent through the as yet unexplored regions of the Utah Lake. The distance between San Diego and San Francisco is between four and five hundred miles, and the two harbors will thus compare:

"The port of SAN DIEGO is the most southern in the territory of the United States, and is of considerable extent, being in fact an arm of the sea; in length ten miles and in breadth four miles; from being land-locked it is perfectly secure from all winds. The entrance is narrow and easily defended, and has a sufficient depth of water—twenty feet at lowest tides—for large vessels. The tide rises five feet. The tongue of kelp, three miles long by a quarter of a mile broad, off the entrance of the bay, must be avoided by large vessels, but small vessels may pass through it with a strong breeze. The bank has three fathoms water upon it. During gales, this kelp is torn up and driven into the bay, where it is troublesome to vessels by the pressure it brings upon them, either causing them to drag their anchors or part their cables. There are many drawbacks to this harbor: the want of water is one of them; the river which furnishes the Mission with water disappears in the dry season before reaching the bay, and the surrounding country may be called a barren waste of sand hills. The town of San Diego, consisting of a few adobe houses, is situated on the north side of the bay on a sand-flat, two miles wide. The mission establishment is seven miles from the town, up a valley to the northeast, and here there is a good supply of water the year round. The river in the rainy season discharges a considerable quantity of water into the bay, bringing with it much sand, which has already formed a bar across False bay, rendering it useless; and well grounded fears may be entertained that it will eventually destroy this harbor also: this occurrence, however, may be prevented at slight cost. The whole country around San Diego is composed of volcanic sand and mud mixed with scoria; the land is unfit for cultivation, and filled with cacti, one of the many evidences of the poorness of the soil; this leaves the port of San Diego little to recom-

mend it but the *uniform climate, good anchorage, and security from all winds*."†

The BAY OF SAN FRANCISCO is thirty miles in length by an average of six in width; a large portion of its southern, eastern and northern shores are bordered by extensive and wide mud flats, preventing the landing at low water of even a boat; so much so that the eastern shore may be said to be inaccessible for a distance of thirty miles; and this impediment prevents it from ever becoming useful, except by the construction of extensive artificial works. . . . "These obstructions reduce this extensive bay very much in size, and it becomes still more reduced when the safety and convenience of vessels are taken into consideration; indeed, with the deep water, cross tides and exposed situations, there are but two safe anchorages, Yerba Buena and Sausalito. The former lies on the south of the entrance, between the island and town of the same name, and is but of small extent, with mud flats, bare at low water to the channel; it is also very much exposed to the prevailing winds, which blow at times with great violence. It is the usual, but by no means the best, anchorage, and has but a scanty supply of water—not sufficient for the population of the town or the vessels that frequent it; this, added to the rocky point on which the town is situated, will prevent it from ever becoming the seat of trade. The population of the town exceeds five hundred inhabitants [several thousand now,] and from its being nearer to the gold mines than Monterey, has become of late the most frequented. The bay of San Francisco is well adapted for a naval depot, or for a place for our whalers to recruit. Its possession insures to us the command of the northern Pacific and the protection of our large and extended interests there; but I know of no place where the natural site of a town can be found throughout the whole bay, and it appears to me extremely difficult to select one where the locality would permit of extensive artificial improvements."‡

"The HARBOR OF MONTEREY is said to resemble the beautiful bay of Naples. It has water and capacities for the combined ships and navies of the world. The winds here never blow home, and the anchorage, therefore, is perfectly safe."‡

Major Emory thus contrasts the two positions of San Francisco and San Diego: "At present San Diego is, all things considered,

* Major Cook, in 1846, left Santa Fe considerably to the north, and pursued a route which he described as perfectly level, with the exception only of seventy-three miles. We have not his report before us.

† Charles Wilkes's, Commandant of Exploring Expedition, Report to the National Institute, 1849. Captain Wilkes gives preference to the harbor at the mouth of the Columbia river; but it is said, on the authority of Lieut. Howison of the navy, the harbor has entirely changed since Wilkes examined it.

‡ Capt. Wilkes, of "Exploring Expedition," &c.
‡ Maury's letter to Mr. King.

perhaps one of the best harbors on the coast from Callao to Puget's Sound, with a single exception, that of San Francisco. In the opinion of some intelligent navy officers, it is preferable even to this. The harbor of San Francisco has more water, but that of San Diego has a more uniform climate, better anchorage, and perfect security from winds in any direction. However, the commercial metropolis must be at San Francisco, owing to the greater extent and superiority of the country adjacent, watered by the rivers Sacramento and San Joaquin, *unless, indeed, San Diego should be made the terminus of a railroad, leading by the route of the Gila to the Del Norte, and thence to the Mississippi and the Atlantic.**

The route from Memphis to San Diego has yet been scarcely more than reconnoitered. Mr. Gregg, in his Commerce of the Prairies, describes a journey made by him, with laden wagons, from Van Buren, on the frontier of Arkansas, to Santa Fe, but with none of that minuteness which is indispensable in forming our judgment with regard to a railroad.†

* Report of Major Emory, attached to Kearney's Expedition.

† There have appeared lately in the columns of the National Intelligencer, a series of ably written papers, signed "Opithloco," upon "Trade to China," in which eminent justice is done to the claims of southern cities, and the full advantages of eastern trade are enumerated. We extract a passage from the writer, in which he affords some interesting particulars of the route from *Memphis to the Pacific*: "Beginning on the west bank of the Mississippi, at Memphis, we will have nearly a perfect level over the alluvial lands to the bank of the St. Francis. In the construction of this part, it may be best and cheapest to place it on piles, five or six feet above the annual overflow. From the west bank of the St. Francis to White River will be over lands firm and above overflow; likewise from thence to the Arkansas, near Little Rock. It appears that Memphis is only about nine miles north of the 35th degree of north latitude, and Little Rock 24 miles south; but by pursuing the course of the 35th degree, we would cross the Arkansas above the mouth, and would utterly avoid the Fourche de Fave pass, near to Daville, on Jean Creek; and in our due west course our route is parallel with this stream to its head, across the Porten River, a small stream that empties into the Arkansas. We will be thrown a few miles south of our direction, by a short bend in the Canadian Fork of the Arkansas. We are then on the plain between the Arkansas and Red River. We will not have a stream to obstruct our direct course until we arrive at the False Washita; by crossing this stream sixty miles north of where it flows into Red River, we will pass through the southern point of the great American desert, extending north three hundred miles, to the head of the Platte River, with no streams in our course until we reach the Rio Grande, about twenty miles south of Santa Fe—where, from its being near its head, is an inconsiderable stream. And in the lands which contain the precious metals in so great abundance as to attract a trade in wagons from Missouri for many years, grading the road will develop many of these mineral resources.

"From this stream, (the Rio Grande,) pursuing our direct course, we pass the heads of streams on each side, none of which approach so near as to cross, and arrive at the Colorado, which discharges its

Major Emory's report covers the ground from Santa Fe to the San Diego; but he, too, admits the hastiness of his notes, and that the best route was not always pursued. The purposes of that expedition besides were altogether *military*, and through an *enemy's* country, which prevented any closeness of observation. Col. Fremont, it is also understood, is now upon this line of exploration, or a part of it, with a view of facilitating the project of the St. Louis Railroad. He designed crossing the southeastern projection, or ridge of the Rocky Mountains, above Sante Fe and Spanish Peaks, and, entering the valley of the Del Norte, trace that river to its source; he would then cross over the Rocky Mountains at some pass there to be discovered, and "survey his last line across the continent, complete his knowledge of the country between the Mississippi and the Pacific, and crown the labors of long explorations, by showing the country between the great river and the great sea to be inhabited by a civilized people, and practicable for a great road, and that on several lines, and which was the best." This exploration is one of the most important yet, and will be necessary before establishing any positive opinion in regard to a route to San Francisco from St. Louis, or indeed from any other point, through some other than the "South Pass," which is in a latitude fully five degrees further north than San Francisco or St. Louis. The government, too, it is said, are now about dispatching Captain Stanley into the Gila valley, and to the Great Utah Lake, by the valley of Arkansas, with the view of a full and complete exploration, occupying about eighteen months.*

The road from Memphis through Arkansas, Van Buren, and a great portion of the Indian Territory, judging from the nature of the lands through which it must pass, is of the most practicable character, and involving the smallest expense. The danger of overflow in eastern Arkansas can, without doubt, be obviated entirely, by proper levees, constructed in the northeastern part of that state. Heavily timbered lands abound upon many parts of the route. Our facts are too meagre, how-

waters into the head of the Gulf of California—passing again near the southern extremity of the Great Sandy Desert, one hundred miles in length, stretching northwest, which would be impassable, but is thus fortunately placed out of our way. And in the further pursuit of our direct course, we arrive at the head of Tule River, which discharges its waters into the bay of San Francisco, the termination of the Pacific road. Directly on our left is the river which flows to Monterey. The road will probably be constructed on the plain between these rivers, and may, with scarcely any variation, touch Monterey in its course to San Francisco, which is destined to be one of the great cities of the United States of America, and is only one degree north of the course of our road."

* General Worth is on his way from San Antonio, Texas, by the route of El Paso, to the Gila valley.

ever, to venture any precise calculation of obstructions and expense. We know that the Memphis Convention, in 1846, pressed the completion of a military road to Fort Gibson, which, if fully explored, would give us all the facts that we want, to that point of the route. There are also good lands upon a great portion of the way, and to us it is perfectly clear, from all the facts we can gather, that the passage from Memphis to Santa Fe presents, to say the least, no greater obstacles than that from St. Louis to the South or some other pass in the mountains.

Mr. Gregg left Van Buren in 1839, with heavy wagons. He passed along the south or main fork of the Canadian branch of the Arkansas, which, near its sources, in the heights about Santa Fe, takes the name Colorado. He adhered closely to the river until the peaks of Angosturas were reached, when, for a short time, the valley of the Pecos was before him. For sixty miles before reaching these peaks or narrows, the party followed a plain road every where passable for wagons. Abrupt projecting routes, reaching even in height 2,000 feet, added great risk to the passage of the narrows. A better road was however pointed out, passing near the *Cerro de Tucumeari*, a circular mound, visible to the southward. This, on examination, was found to be all that was desirable.

It is to be regretted Mr. Gregg took no observations of the altitudes, &c., of the route. Reviewing the whole expedition, he says:

"If we take a retrospective view of the country over which we travelled, we shall find but little that can ever present attractions to the agriculturist. Most of the low valleys of the Canadian, for a distance of five hundred miles, are too sandy or too marshy for cultivation, and the upland prairies are, in many places, but little else than sand hills. In some parts, it is true, they are firm and fertile, but wholly destitute of timber, with the exception of a diminutive branch of the *Cross Timbers*, which occupies a portion of the ridge between the Canadian and the North Fork. The Canadian River itself is still more bare of timber than the *Upper Arkansas*. In its whole course through the plains, there is but little except cotton wood, and that very scantily scattered along its banks; for some places for leagues together not a stick is to be seen. Except it be near the mountains, where the valleys are more fertile, it is only the narrow bottoms which skirt many of its tributary rivulets that indicate any amenity; some of these are rich and beautiful in the extreme, timbered with walnut, mulberry, oak, elm, hackberry, and occasionally cedar."*

Comparing the route to Santa Fe, through Arkansas, with that of Missouri, he remarks:

* Gregg's *Commerce of Prairies*, vol. II. 54: but what other route has any advantage in timber over this?

"As regards the two different routes to Santa Fe, although Missouri, for various reasons which it is needless to explain here, can doubtless retain the monopoly of the Santa Fe trade, the route from Arkansas possesses many advantages. Besides its being some days travel *shorter*, it is *less intersected with large streams*, there are *fewer sandy stretches*, and a *greater variety of wood-skirted brooks*, affording throughout the journey, very agreeable camping places. Also, the grass springs up nearly a month earlier than in Upper Missouri, for the rigorous winters of Missouri often prove fatal to the unacclimated Mexican animals, &c."

We extract the following from the circular of the Fort Smith, Arkansas, "California Emigrating Company," which, however, like other documents of the sort, must always be taken with "many grains of allowance."

"The route up the north fork of the Canadian River, as laid down by Mr. Josiah Gregg, in his '*Commerce of the Prairies*,' and lately travelled by a detachment of United States dragoons, under the command of Lieutenant Buford, to Santa Fe, leaving Santa Fe, however, to the north some distance, and going near Albuquerque, immediately to El Paso, and perhaps take the route travelled by Major Cook, United States army, in the year 1846. This road he describes, in a letter to Colonel Abert, as being comparatively level, and the water and range good, with only a single exception of a distance of 75 miles. The whole distance from Memphis to the Pacific is estimated by Lieut. Maury, of the United States navy, to be 1,500 miles; and Fort Smith being 300 miles nearer, the distance will be, according to his estimate, only 1,200 miles; but as a straight road has not yet been laid out, we cannot give any correct estimate of the distance from this point to the Pacific. However, we feel certain the distance is much nearer than was at first anticipated. Wagons can travel on this route with ease and safety: the plains being so large, the ground over which the company will have to pass can be selected, and bad places thereby avoided. Two hundred miles of this route is a plain wagon road; and for that distance provisions and forage can be purchased at very reasonable prices. It is supposed that the company will arrive at the point of destination in 80 or 100 days from the time of starting. We would here remark, that an excellent guide, one well acquainted with the country, and who can speak the Comanche and other Indian languages, will accompany the expedition."

We have constructed, with some considerable pains and labor, from all the various explorations west of the Rocky Mountains, and charts, a diagram, representing,

* Gregg's *Commerce of Prairies*, vol. II. 65.

1. The nature of the route and its elevations, selected by Mr. Whitney, after the Notes of Fremont, between the South Pass and the mouth of the Columbia.

2. Route, &c., from South Pass to San Francisco. (Fremont's.)

3. Route, &c., from Santa Fe, or Paso del Norte, 200 miles south of Santa Fe, to San Diego. (Emory's.)

On inspection of a profile view of the three proposed routes, it is evident that the one from St. Louis to San Francisco, by the South Pass, framed upon the very latest map of Col. Fremont, 1848, is so mountainous, as to be almost impracticable. The route to the mouth of the Columbia is as bad, if not worse, whilst that from Santa Fe or the vicinity, to San Diego, by the valley of the Gila, is a most beautiful one, presenting but in a small portion any serious obstruction. The profile views are made with great care from actual surveys by government engineers; but these surveys are not as perfect by any means as they should be. They yet indicate very much. From the vicinities of the Del Norte, another route is suggested by Mr. Leroux, to the southward of the Gila, and intersecting that river at a considerable distance from its source; the road is supposed to be good—through an open prairie—if water can be had. It deserves exploration.

We could easily show that there are no grades on the San Diego route too considerable to be overcome by the present construction of railroads, even without inclined planes. This we may show hereafter. But it is remarkable, at this very period, two important inventions and patents are noted by the press, by James S. French, of Virginia; the one a brake for stopping an engine and cars almost instantly; the other for the easy ascent of any grades, without the use of inclined planes or levelling. A railroad may be laid down over the ordinary undulations of the earth, like a turnpike road, and engines and cars be so constructed that they can go over it with safety. To accomplish this object, the invention enables the engineer, by mechanical means, to supply any degree of adhesion which may be required, at any instant, and to dispense with it the moment he ceases to need it. And to do this, there are no rack-rails, or cog-wheels, or centre-rail; nor is there, by this plan, any such resistance to the progress of the train as would be caused by adding weight to the engine, in order to produce the requisite adhesion.

Having now gone over the entire field of projections, it is full time to pass to some general observations. A few points we think abundantly evident, from the facts that have been introduced and from those that are readily suggested:

1. That no connection or line of intercourse between the Atlantic and Pacific Oceans is

likely to be popular among us, or succeed, which does not pass through and intersect in its *whole extent our own territory*. All others depend too much upon the wills and caprices and jealousies of foreigners, which may at any moment put an end to the enterprise. Besides, such *foreign* roads do not, to the same extent, benefit and extend our own population, and conduct their persons and their property from location to location in the march of western empire. Any such roads adopted by us must be *temporary*; and with reference to canals, the great facts stand out, that the sailing distance to the East must yet be very vast, supposing them constructed; that their construction involves as enormous outlay, all things considered, as some central railroad; that if undertaken by a single nation, the jealousies of others would be excited, and no union of nations on the subject could be expected, from the almost impossibility of keeping such a canal *neutral*.

2. That if a great railroad be constructed through the possessions of the United States to the Pacific, that road *must be as nearly as can be central*, to enlist the sympathies, regards, and co-operation of *all sections of the confederacy*. No city or town can set up a special claim. The object is *NATIONAL*, and the American people should speak. Hence the rivalries of the lakes, St. Louis, Memphis, Natchez and Galveston, would be preposterous, and defeat the best concerted scheme of either. Not only must the road be *central* to command a sufficient support ever to start or construct it, or make it afterward prosperous, but it must be *upon such a line and to such a port* as shall be clearly established to be the *best*, all things considered. In such a spirit, difficulties and obstructions sink down into insignificance. The facts are yet not all before us, that we may pronounce *authoritatively and decisively* which is that line and that route.

There are yet reasons and facts sufficiently cogent to determine our decided *preference, in the present state of information on the subject*, for the *Memphis terminus*, upon the Mississippi, and these we will concisely state.

1. This route to the Pacific, whether at San Diego or San Francisco, equally good harbors, at least if the former be not the best, to leave Monterey out of the question, is as short, *very nearly*, as any other American route proposed—much shorter than the road to St. Louis—many hundred miles less than that proposed by Mr. Whitney.

2. The Memphis road is more nearly in the *centre* of the continent, (Natchez being that point longitudinally,*) is nearer the mouth of

* Dr. Cartwright. We have it on other authority, that the lines drawn through the extremities of Maine and Texas, Florida and Iowa, intersect each other at Memphis.

the Ohio, nearer the Atlantic Ocean, is at a point *always* navigable, and is as easy of communication with every other section of the Union, as (we maintain *much easier* than) any other road.

3. The route from Memphis is *at least as good*, we believe *better*, than any other, so far as the face of the country and obstructions are concerned. It is not so far *south* as to be within the regions of sultry suns and disease, nor yet so far *north* as to be among continued snow and ice, but is through a temperate, and, for a large part, most salubrious climate.

4. It is at a point where the *Mississippi is always navigable*.

Notwithstanding this preference, however, convince us of a better *American route*, and we yield. More full and perfect surveys may fix us in our prepossessions or altogether destroy them. Let us have the surveys *at once*. In the spirit of compromise between the north and the south and the west, should rivalries arise, they might perhaps only be silenced by the selection of a *terminus* at some point *opposite the mouth of the Ohio River*, supposing that surveys should establish its equal practicability.

For ourselves, we declare for the road—the road as early as possible—the road over the best route, and with the best *termini*—the road most calculated to subserve the purposes of the *whole Union*—and we do not intend that any idle preferences or prejudices, or, worse still, any discreditable and unpatriotic rivalries shall attract us to the right or the left in the pursuit of this great and stupendous enterprise, which shall mark an epoch in the history of mankind. Here indeed the object is *our country*, and MAN.

Stupendous as appears this proposed enterprise, there is nothing in it at all impracticable. For a nation so extraordinary as ours, the *feat* has only to go forth, and the *deed* is done!

We say not, nor pretend to say, how this road shall be built; whether, as Mr. Whitney proposes, by a grant of the land on either side to a *private company*, making of it the greatest and wealthiest corporation in the world; or, as Mr. Benton would have it, by government appropriations and government officers, thus fearfully increasing executive patronage, and leaping at once headlong into a system of such prodigious expenditures for *internal improvements*, by the federal government, as shall in a few years make it lose the *federal* character altogether, and become, unless some checks can be devised, one of the most powerful and irresistible *centralisms* on earth; or yet by *state* appropriations and action *conjointly with individuals*, as Mr. Calhoun perhaps would have it, or as economy and expediency might demand, since government ever pays *much* and gets *little*, if indeed the means of states and individuals are adequate to the purpose. We express not an opinion here. Concert of

action, counsel, deliberation, are required. Wise heads must be called upon to pronounce. We see difficulties, vast difficulties in either or any view, but *our faith in the road, and the road at once, is unshaken*.

It is demanded by our *wants*. Would we be without this great link to bind together our continent, extend our pressing population, fill up our interior valleys and vast wilderness with an enterprising people, secure our defences by land and water, and bring together our merchants and manufacturers from every part of the continent in common marts?

We want the road to develop our *mineral resources*, which appear to be inexhaustible. We know not yet the treasures which are beyond the Rocky Mountains. We have found virgin gold in quantities to bewilder our imaginations and astound our judgments, yet we know scarcely any thing yet of the country. Are there other precious metals? Is there iron? Is there coal? which have enriched Pennsylvania and given rise to her public works, the most extensive in the Union.* We know that the quantity of salt is altogether inexhaustible on the route; and in this article so valueless that it will not bear a transportation two or three times as great only as is borne by the coal of Pennsylvania!

We want the road, finally, to complete for us that *commercial empire* after which we have sighed—which has been indicated for us in every step of our progress, from the landing of the Pilgrim Fathers, and which appears to be *ours* by a manifest and inevitable destiny. *Shall we not then have it?*

RAILROAD TO THE PACIFIC OCEAN.

—ADDRESS OF THE MEMPHIS CONVENTION TO THE PEOPLE OF THE UNITED STATES, 1850.—*Fellow-Citizens*: The undersigned have been appointed a committee by the National Convention, which assembled at Memphis, Tennessee, on the 23d of October last, to prepare an address to the people of the United States in regard to the increase of facilities of intercourse between the Atlantic and Pacific oceans.

The settlement of the Oregon question, and the treaty of peace with the Republic of Mexico, fix and quiet us in the possession of territories between the lines of our western settlements and the Pacific ocean, extending through 17° of latitude and 14° of longitude, and embracing an area of very nearly 900,000 square miles, scarcely less than one half the whole previous domain of the republic.

This immense empire between the western tributaries of the Mississippi, the Missouri and the Gulf of Mexico, and the Pacific ocean,

* Lieut. Maury, in his letter to Mr. King, says that Lieut. Minor, of the navy, who was governor of San Diego, informed him of having found bituminous coal in the Solidad valley, about six miles from the port. He found it on the surface, and used it in the forge, though it was impregnated with sulphur.

although sparsely populated in parts, is yet an unreclaimed wilderness, unexplored in its greater extent, and undescribed, except upon particular lines and by hurried reconnaissances. The trail of the Indian, the narrow path of the hunter and the trapper, the emigrant's way over which his wagons have toiled, evidence the only interruptions of these vast and unbroken solitudes.

Embracing, as our limited knowledge teaches us it does, a wide range of climates and a great diversity of physical characteristics, this western empire is destined eventually to give habitation to millions of freemen, and to exhibit all the highest evidences of civilization and progress in arts and in industry.

If nature in her sternest and most forbidding aspects is presented in much of its extent, frightful mountain ranges and deep gorges, hopeless deserts, parched and sterile plains, there are not wanting tracts equalling in extent large states of our confederation, fruitful in agricultural capacities, and offering returns to labor and enterprise as high as in any other quarter of the world.

Within this region have been discovered the most valuable mines of the precious metals, rivalling in extent and in richness those of a fabulous antiquity, and seemingly, from every indication, inexhaustible for ages to come.

Its western limits for 1,000 miles are washed by the waters of the Pacific, and indented with bays and harbors, capacious and safe, and adequate for every commercial want. This beautiful ocean, which floats the commerce of oriental climes, calm as a lake, sustains to its shores almost the relation of the Mississippi to our inland states, conducting with equal facility their coasting trade, in vessels that could not for an hour endure the Atlantic gales.

The ports and harbors of western America are from 13,000 to 17,000 miles in sailing distance nearer to the great marts of Asiatic or eastern commerce than those of the Atlantic cities of the United States or of Europe.

What can be wanting to a region so endowed and circumstanced to command the highest influences and position, but the presence of an active and enterprising population, who shall hasten to render available every advantage of nature? Such a population, it is believed, has begun its rapid advances.

A state government is even now in process of organization upon the Pacific shores, another in the almost unexplored regions of the Utah lake; whilst a third and a fourth, in hurried succession, may be expected out of the territories of New-Mexico and Oregon. To these there shall be added, ere long, others to demand admission in the great confederation.

Admitting the possible capacity in Oregon, California, and New-Mexico to support a population to the square mile as great as the av-

erage now embraced in our states and territories, there would be an aggregate there of 10,000,000 of inhabitants. The calculation will not be regarded wild when it is reflected how sparsely populated and almost unreclaimed are many of these states and territories. Not one half of Vermont, New-Jersey, Virginia, Carolina, Georgia, or Ohio, being in cultivation; not one fourth of Maine, Maryland, Illinois; not one fifth of Texas, Wisconsin, Iowa, &c. If but one half the country were adequate to habitation and industry, and the present density of Pennsylvania were attained, the whole amount would then swell to 20,000,000, or to very nearly the existing strength of the nation. The density of Pennsylvania is but 37 to the square mile, whilst that of some of the New-England states is several times as great, and of many European nations immensely larger.

Within what period either of these figures can be attained, or proportionally high ones, will depend upon a variety of circumstances impossible to be taken into the calculation. In the most favorable view, it will aid us to consider that the United States have gained in sixty years almost the entire amount claimed upon the highest, and the Mississippi valley in half that time upon the lowest basis, and that within the period of almost a single year upward of 60,000 emigrants have settled in California.

Whatever physical or other advantages possessed by a country, the inducements to emigration and settlement must be greatly counteracted or controlled by the expense and difficulties of access and of intercommunication afterward. In the case before us, the emigrant's wagon must rattle over crags and mountains, and through inhospitable wildernesses, for wearisome months and with innumerable hardships, after the frontiers of the states are passed. Or if the routes by the isthmus or of Cape Horn be selected, then a dangerous and protracted navigation of the ocean for 5,000 or 18,000 miles must be compassed, equivalent to several voyages to Europe. Nothing but the highest and most alluring stimulants could surmount obstacles such as these. Exile, hopeless exile, and the sundering of every sacred tie are involved. Fairy dreams of treasures as precious and as inexhaustible as the lamp of Aladdin ever revealed in Eastern fiction, awaiting the hand that shall garner them without an effort, may be such a stimulant; but are not these dreams necessarily "unreal" and doomed, as all experience demonstrates, to be eventually dissipated? An event like this would consign the country, however otherwise favored, to ages almost of *wilderness* existence.

History evinces every where, in the clearest and strongest light, the extent to which emigration and settlement are influenced by natural and artificial facilities of inter-

course. The great Mississippi valley may emphatically be said to be the creation of the *steam engine*, for without its magic power, of how limited avail were these immense water-courses that mark the country, and what centuries must have elapsed before the progress of arts and of enterprise could have swept away the traces of savage life!

Not alone must there be furnished to the emigrant a passage for himself, expeditious and cheap, but equally indispensable is it that the produce of his labor and his enterprise command a market by similar facilities.

Restricted to the Cumberland road across the mountains, or to the flat and keelboat navigation of the rivers, with their attendant uncertainties and monthly delays, could western produce have ever sought in any quantity eastern markets, or would there have been western producers? Since the dominion of steam has been established upon the Mississippi, the great west has increased from a population of 2,217,463 in 1820, to 3,672,569 in 1830, 5,302,918 in 1840, and 10,000,000 very nearly in 1850!

If all of this were not too evident to need illustration, it might readily be shown from the *home* trade of a country as compared with the *foreign*, the influences of near and easily accessible markets over those that are more remote. Our whole foreign trade, with the 700,000,000 of Europe and Asia, reaches in amount but \$300,000,000, whilst among the 22,000,000 at home is conducted an annual commerce in purchases and sales of at least \$1,500,000,000! Trade, which seeks exclusively its own advantage, acknowledges no distinctions or prejudices between the native and foreigner. Tariffs and restrictions may account for many of its phenomena, but *vicinage* and *transportation* furnish the more constant and reliable solution.

Confine the west to its original modes of communication, and give to her the present population she supports, the extent of her intercourse with the eastern states, it may be confidently affirmed, would not be greater than our present intercourse with France or Germany, the facilities in either case being about the same.

Nor are the existence of means of easy, cheap, and expeditious intercourse between the different sections of a country important only in advancing the interests of its trade and population. They have an influence still higher and more marked upon its political institutions. In the *federative* element of our republican system they constitute an important basis. A dense population, widely diffused over an immense area, and separated by physical barriers, will, from the absence of all intercourse, engender local and provincial interests, fixed prejudices, and even hostilities. The absorbing and controlling influences of great cities begin then to be paramount, and,

as in Europe, to give laws to the state or the empire. A government equal in its benefits and its burden upon all the parts becomes impossible. The remote representative will occupy almost the entire year in passing from the capital to his constituents and back again, and revolution after revolution change the whole face of government before these constituents can be advised of the danger and prepare to counteract it. Strong or *central* governments become indispensable, and large standing armies, which are at war with the whole theory of federation and republicanism itself.

The authors of our present government seem to have been apprehensive of this danger, but it was not permitted to them to see the great remedy which the progress of arts, sciences, and civilization has revealed. They saw how problematical was the political connection of the west and east, separated by great mountain chains and barriers occupying months in the passage. Hence the scope for Spanish intrigues, the machinations of ambitious demagogues, and half-fledged treason itself. Hence the anxious movements of executive power and of Congress. What was but *incipient*, can any one question, had there been a dense and crowded population, would have been *actual and triumphant revolution*, and the republic of the Mississippi before this an established fact!

How much stronger then the apprehensions for regions as remote as those of the Pacific, more distant from the capital at Washington than Great Britain, and to be reached by communications more hazardous, protracted, and expensive. Is it not insatiation to suppose that states so remote could be content to receive their laws for any time from this capital, or would they not infinitely prefer to it a separate and distinct organization? The soundest and best republicans would take this view. Not otherwise could the high destinies of that country be achieved.

The problem of our *federative* system becomes impossible of solution, where the number of states and the extent of territories have augmented so vastly, unless some *cohesive* influences can be brought to operate. It has been for *steam* and *magnetism* to supply this cohesion, annihilating the effects of time and space, and presenting the greatest security for the political regeneration of man, and the eventual triumph of our free institutions.

The highest interests of the United States demand that her vast territorial possessions be peopled in the shortest period of time, and that every legitimate and *constitutional* encouragement be given, come in what shape it may, for the augmentation of the resources, power, and *unity* of the nation.

The convention which assembled at Memphis had for its object an increase of the facilities of intercourse between the Atlantic shores and the population which has located,

or may locate itself, upon the Pacific, or in the country intermediate, even as an earlier convention at the same city looked to the connection of the Atlantic with the Mississippi valley. Delegations were in attendance in greater or less strength from the states of New-York, Pennsylvania, Virginia, South Carolina, Georgia, Alabama, Texas, Louisiana, Mississippi, Arkansas, Tennessee, Kentucky, Missouri, Illinois and Ohio. The results of their deliberations, which were conducted harmoniously, have been given to the world.

Three methods of increasing the facilities of intercourse between the oceans are recommended to the nation by this convention:

1. A railroad across the continent, and through the states and territories of the Union.

2. A connection by ship-canal, or railway, though some one or more of the points that have been indicated, far to the southward of our territories, and within the jurisdiction of Mexico and Central America.

3. A military road along the Mexican frontier.

1. *A railroad across the Continent.*—The convention took the broad ground of recommending to Congress explorations and surveys of all the routes designated by public opinion, and a selection of that route which is easiest of access, best calculated to subserve the purposes of national defense, most convenient, most central, and which can be constructed upon the cheapest terms. In the present limited information which obtains, it was impossible to go further and commit the convention to any one of these routes as an indispensable condition. A marked preference, however, was expressed, as we shall hereafter see.

The action and force of the body was concentrated upon the road itself, as necessary and proper, and within reach of the means and enterprise of the American people. Upon these points there was little, if any, diversity of opinion.

No plan of construction is recommended, except that the public lands of the United States constitute a legitimate and proper fund for the purpose.

Sufficient, it is believed, has been said of the necessity and propriety of greatly increased facilities of intercourse with the Pacific shores of the Union, and the question of a railroad must stand or fall on its own merits of practicability and consonance with the enterprise and resources of the nation.

In estimating the practicability of railroads, the considerations of length, natural obstacles to be surmounted, character of intermediate country, population and productions to be commanded, *termini*, are of controlling importance.

A road to the Pacific ocean concentrates in the highest possible degree upon itself

almost every objection that can be raised from these considerations! It is four times the length, on the shortest route, of any road as yet constructed in this or any other country. Its path is interrupted by obstacles of the most stupendous character, mountains, gorges, rivers, deserts. Immense tracts for hundreds of miles of the country through which it must pass are hopeless and sterile wastes. In scarcely any portion of its giant length have advanced the traces of civilization or even population. Fatal in the general commercial view must be the weight of these objections, unless there be found relief in the character of the *termini*, or in the political and military considerations that are involved.

Combining the political question with that of the *termini*, which cannot otherwise be considered than on the one side the 20,000,000 of enterprising and active producers of the United States, and on the other the 700,000,000 inhabitants of Asia and the Indian seas, do these relieve the matter from its otherwise most unpromising attitude?

Political considerations have nothing at all to do with the action of individuals or of companies pursuing their own ends and devices, and in the conflict of opinion which exists with regard to the extent of government power in constructing internal improvements, it is impossible to say how far they may be admitted by it to influence the construction of the road. Could such considerations induce a direct appropriation from the national coffers, or a pledge of the national faith? The right and power of donating the public lands in such a cause seems to have been nowhere denied; but would such donations be adequate to the construction and operation of the road, irrespective of its commercial complexion?

Taking the most favorable case that can be presented: that population will follow the line of the road in a broad belt of from 50 to 200 miles, and settlements keep pace with construction—that no portion of the road can be through a wilderness, since it can be said of scarcely any part of the country to be traversed, it is incapable of supporting population and industry in any of its employments and forms—that hundreds of thousands of emigrants would be attracted from Europe annually as operatives, who would all become permanent settlers on the route—that a great road is but a series of lesser ones, and that each of these last being necessary to the trade and travel of its own neighborhood, and capable of being supported by it, the whole must, for an obvious reason, be capable of a similar support—that the most which can be said against the practicability of such a road is, it is *beyond* and not *opposed* to our experience—that indications of great and valuable mineral resources upon the lines to be pursued promise vast contributions to the enterprise—that on

the most favorable routes projected the obstacles are only in limited sections, whilst the major extent may be constructed with less difficulty and expense than upon the average of American roads—that all experience shows the railroad creates the trade that supports it, and augments indefinitely the intercourse of points commanded—that in the progress of improvement the cost of construction and the rates of freight have progressively and regularly declined, and that the tendency in the same direction continues undiminished, &c.

Giving their full weight to considerations of this kind—and to many of them we shall recur again—it may be doubted, upon the whole, whether they leave the matter so unembarrassed that the practicability of a Pacific railroad within two or three generations can be demonstrated, unless the possible trade with the Pacific ocean and the East give a new turn to the discussion.

From the earliest periods of the world's history the trade of the oriental seas has enriched the nations who have been so fortunate as to control it. It is unnecessary to dwell upon the power and the glory and the maritime splendors of Tyre, and Alexandria, and Venice, and finally of Britain, who has now usurped the sceptre of them all. It is a trade that has endured and triumphed over every character of obstacle, and from its precious value perennially flourished. Neither trackless deserts, nor savage man, nor fierce storms and rude navigation of the deep for tedious months, have disturbed its course. Nations have warred for the empire in its gift, and diplomacy exhausted upon it her highest resources.

Can this sceptre be wrested into our hands through the instrumentality of the states upon the Pacific shores of the Union so immediately proximate to the very gates of the East, and will a railroad connection between these states and the valley of the Mississippi connecting with the lines that already strike the Atlantic coasts effect the transfer?

The value of eastern commerce with all the world was, in 1841, according to a report made in the Senate of the United States, about \$250,000,000, or, to be more specific, in imports, \$158,866,980, and in exports, \$86,453,238, the balance being greatly in favor of India. The number of ships employed was 1,584, of an aggregate tonnage 608,515. The value of this trade has been greatly increased, and may be estimated at the present time nearer \$350,000,000, requiring about 2,000 ships, of the gross value, say, \$60,000,000. The commodities included in it are, in the main, of the most valuable character, being silks, teas, spices, the finer manufactures of cotton and wool, indigo, opium, drugs, fancy ware, precious metals—and these are such as are capable of enduring the most expensive

transportations. These articles might be indefinitely multiplied to suit the wants and even the caprices of the respective parties, could there be any considerable reduction in the transit expenses. A reduction of two thirds, or even one half the distance, and a similar reduction in time, would lead to an almost unlimited extension. Many new products would then endure transportation which are now too perishable or bulky. The travel would also be immensely increased. New markets would be opened for millions and hundreds of millions of eastern consumers. The Sandwich Islands are but now in the infancy of their growth. There are 1,500,000 Polynesians. Celebes contains 3,000,000, and Java 5,000,000 or 6,000,000, who export \$30,000,000 annually to Holland. Sumatra, with a population of 2,000,000, exports 30,000,000 pounds spices. Borneo, with 3,000,000 or 4,000,000, exports gold, tin, antimony and diamonds. The Philippines have 3,500,000 producers of sugar, coffee, indigo and hemp. Singapore is the great centre of Indian trade. India contains 184,000,000, including Cabul and Afghanistan, Calcutta, Bombay, Madras, Ceylon, &c., with a commerce of \$150,000,000 annually. Australia is an infant but most promising colony. Russian America is not destitute of hope, nor the Manchoo Tartary. The 50,000,000 of Japan with their rich produce are still suffered to remain almost closed entirely to commerce. The empire of China, with 350,000,000 inhabitants, we scarcely see more of than the walls. The great rivers Shanghai and Yang-tee Keang, the Mississippi and Missouri of the eastern continent, each about 4,000 miles in length, connect the coasts with the vast and densely populous interior.

Can it be imagined, then, that these immense regions, so thronged with human beings, most of them in high advancement, have already reached the acme of their foreign trade—or is it not plausible, that, when better systems of intercourse are opened, jealousies removed, and civilization extended, the amount of trade conducted with them will be augmented several fold, reaching, perhaps, in the annual aggregate, to nearer \$500,000,000 or \$800,000,000, or even eventually \$1,000,000,000? Instead of 2,000 travellers annually visiting the East, would not the number in such a contingency swell to 30,000, or even 50,000?

Will this great trade prefer to its present routes a rival one across the Pacific of 4,000 or 5,000 miles, for example to San Francisco, there to be taken 2,000 miles upon a railroad to the valley of the Mississippi, thence 700 to 1,000 miles by steamboat or continuous railroad to the Atlantic or gulf ports, thence for 3,000 or 4,000 miles to Europe, being a total distance of 10,000 or 12,000 miles,

against 18,000 to 20,000 at present, requiring, in the one instance, from 25 to 37 days, and in the other 110 to 160 days!

Many and strong doubts may be entertained even by the most sanguine, and it is not to our purpose to hazard the measure by the expression of any degree of confidence which the facts will not conclusively warrant.

Upon the one side may be alleged the high rates of railroad transportation in comparison with shipping, the greatly increased cost and detriment of so many transshipments, &c., &c.; whilst upon the other, the saving in interest, and insurance, and distance will be pressed with equal force. These savings would amount, upon a reasonable estimate, to the following: interest upon the value of half the shipping discharged, viz, upon \$30,000,000, \$1,500,000; three months' interest in time gained, upon \$800,000,000 products, \$3,500,000; total, \$5,000,000.

A bonus upon this showing of \$5,000,000 per annum is offered to the railroad, which amount may be reasonably charged upon the present *shipping* receipts of eastern commerce.

In addition to this consideration, there are many others which should be kept steadily in view. Railroad enterprises are still in their infancy, and the tariff of freights they have adopted has already been reduced to an extent which does not appear to have been within the contemplation of their most enthusiastic advocates. They are now employed in transporting, for hundreds of miles, coal, iron and granite, the heaviest and least valuable, in proportion to bulk, of all known commodities. A single locomotive, of American construction, will haul from 1,000 to 1,200 tons, at the rate of ten miles an hour, when twenty tons in the same time was originally considered the *ultimatum*. They compete with canals and run parallel with the banks of considerable water courses. Their cost of construction has been undergoing continual reduction, and is now from one third to one half less than at earlier periods. This reduction is the result of improvements in the manufacture of bar iron, which sold in Liverpool at £14 per ton in 1825, and is worth, in 1849, £5 5s., promising even greater reductions in our own country when the process of Mr. Salter, of New-Jersey, lately patented, is set into successful action; of depreciation in the value of labor and the interest of money; of more economical and experienced management and rapidly progressing improvements in the power, character, and cheapness of machinery, admitting of vastly increased work in the same time; of greatly lower requirements in the extent, &c., of grading operations and amount of levelling necessary—immensely carried out by Mr. French, of Virginia, who, by supplying adhesion to the wheels, and reducing the weight of the engine, enables it

to ascend and descend elevations *without inclined planes*. With the reduction of all these elements of railroad economy must follow greater and greater reductions of freight.

The average rates upon railroads in the United States may be fairly stated at three cents per ton per mile, against fully six cents at a period twenty years ago. This average, for the reasons above hinted, in the next fifteen or twenty years, or by the time a Pacific railroad could be in operation, it may be presumed will fall in an equal proportion, or to one and a half cent per ton per mile, being \$45 from ocean to ocean. One cent per ton is the lowest rate at which freight has yet been transported upon railroads in our country, and if we make the reduction referred to, there would be for similar freight a charge of one half cent per ton per mile, or \$15 the ton from the Atlantic to the Pacific, 3,000 miles. Upon the lowest or highest of these rates a barrel of flour, beef, or pork, could be placed upon the Pacific from the Mississippi valley, at from \$1 50 to \$3 00, and a bushel of corn or wheat from 25 to 50 cents, a hogshead of sugar from \$7 to \$15.

The lower rates for the bulky and less valuable products, and the higher for those of more precious character, would be a fairer estimate. It is known to be the custom now of most of our roads to make discriminations of the kind, producing their dividends from passengers and the more valuable articles, and taxing the heavier with nothing but the wear and tear of the road, and the actual cost and labor of transportation.

These facts and suggestions are presented for what they are worth. If freight and merchandise can be transported over the route at any thing like the cost indicated by us, then the problem of the eastern trade is far less difficult of solution than might have been imagined. These costs can be demonstrated, all things considered, about the same as are at present incurred, including, of course, the freight from either terminus to Asia or to Europe.

If, on the contrary, the *present* average of freights must always be maintained, then the case against the railroad, so far as Europe is concerned, is too strong perhaps to be resisted.

In regard to passengers, a different ground may be taken. The saving in time for them will be from twenty to thirty days. These passengers now pay from \$600 to \$900. This route would not exceed \$250. The inducements to such travel would, of necessity, be vastly augmented, and Europeans might all prefer to take it.

The American trade with the East, too, will stand upon a foundation altogether more favorable. This trade, including the fisheries, now reaches \$25,000,000 to \$30,000,000 annually. In the progress of our population and industry it is rapidly increasing, and must reach \$50,-

000,000 or \$75,000,000. A road will give to it an immense stimulus. We are becoming a leading manufacturing as well as agricultural people, and the great west, from the Alleghany to the Pacific, can have no better avenue of trade with India than this, if any so good. It is believed that the Atlantic states would find an equal advantage.

A railroad is therefore presented to the people with a bonus as previously explained of \$5,000,000 per annum in its favor, with such carriage of freight and passengers as it is bound to monopolize, through an immense and growing region, with the whole trade of our Pacific coasts and the Atlantic at its command, with the considerable profits of mail carriage and government stores, with a large part of our rapidly growing trade to India, and as much of that of Europe as it can by competition induce, and superadded to all with incalculable political and military services to be conferred, and the question is asked, Can such a road be regarded expedient and proper?

A final question remains to be decided: Is it within the reach of our enterprise?

The highest amount which has ever yet been assumed for the road is \$100,000,000. The interest upon this amount, at five per cent., is \$5,000,000 per annum. Wear and tear of the road, suppose five per cent., or an entire destruction in twenty years, \$5,000,000. The working expenses of a road upon the gross earnings is estimated at fifty per cent. Therefore there must be an aggregate earning to support the road, upon this basis, of \$20,000,000 per annum. The aggregate earnings upon all American railroads is now about \$20,000,000, and upon those in Great Britain \$50,000,000, paying in the last instance an average dividend of 4.24 per cent. To earn \$20,000,000 would require 100,000 passengers, or 50,000 either way, at \$100, \$10,000,000; mail and military service \$2,000,000, freights \$8,000,000.

But this is putting the case in the worst possible light, since upon no calculation is it proposed that the road shall pay *interest upon its cost*, that cost coming entirely out of the donation of government lands to the contractors. There would then be but the cost of repairs and working expenses to provide for. The sum of \$100,000,000, too, is based upon the estimate of 2,000 miles, and an average cost of \$50,000 per mile; whereas, upon the shortest projected route, the distance may not exceed 1,500 miles, reducing the sum to \$75,000,000. Fifty thousand dollars the mile is double the average of roads already built, and five times the *minimum*. The average would give, upon the shortest line, less than \$40,000,000. *This is the most favorable possible view.*

But admitting the gross figure of \$100,000,000, and the high estimate of 2,000 miles, is there any thing in the idea to stagger the American mind? We shall familiarize our-

selves with it by some reflections, and see how soon it loses its imposing and formidable character.

In about twenty years there have been constructed nearly 7,000 miles of railroad in the United States, and those in *progress* will probably swell the amount to 10,000 miles. The amount expended already reaches \$200,000,000. Of these roads 1,000 miles centre at the city of Boston, and required an outlay of \$49,221,400. Our whole public works constructed, including every description in the same time, would perhaps reach \$500,000,000. Great Britain meanwhile has built 5,000 miles, at a cost of \$550,000,000, and projects 4,000 additional miles, swelling the aggregate to \$1,000,000,000. Her great Northwestern road, 428 miles in length, exhausted \$104,000,000 in its construction, sufficient to build our way from ocean to ocean. France has expended \$187,000,000, Germany \$168,000,000, Holland \$39,000,000, and even Russia, despotic Russia, is on her way with three stupendous routes, from St. Petersburg to Warsaw and Oracow, to Moscow, to Odessa, to connect the Volga and the Duna! The passengers increased on British roads from 23,468,896 in 1843, to 57,965,070 in 1848, or more than double, and the receipts from them in the last period was £5,720,282, or about \$30,000,000. The total receipts from passengers and goods had augmented in six years from £4,535,189 to £9,938,551, or from \$20,000,000 to \$50,000,000. The average cost per mile of British railways is £56,915, or \$275,000, the Blackwall road having cost nearly \$1,500,000 per mile! Her locomotives have reached 67, and in one instance 70 miles the hour, the average loss of life being, in 1847, 1 out of 2,887,053 passengers carried, and in 1848, 1 in 6,428,000; the German roads giving only 1 in 25,000,000!

When railroads were first suggested in our country, their originators were regarded as the most desperate and chimerical of men, and the most ruinous failure predicted to every scheme. We have lately had the privilege of inspecting a chart made by one of these *mad-men*, which fell still-born, and was soon forgotten, but which sketches, twenty years ago, when there were not 200 miles of successful railroads in the country, several thousand miles of routes, in various directions, and even across the mountains to the Mississippi valley, nearly every one of which has already been built, and is in successful operation, or in course of construction. A road of 2,000 miles is a no greater project than those of 400 miles made by this *mad* author on his chart twenty years ago, if half so great.

Obstacles to be overcome are nothing in the progress of modern enterprise, and the rule of faith seems to have been adopted, "This is impossible—it is therefore true!"

Is there any thing that shall unfit a nation like ours for vast and stupendous enterprise!

Our territorial extent has increased in twenty years, from 1,700,000 to 3,000,000 square miles; our population in fifty years, from 4,000,000 to 23,000,000—is doubling itself in every generation, and at the close of the century must reach 70,000,000 or 80,000,000, equal almost to the present strength of Great Britain, France, and Germany combined. From the island of Brazos, on the Gulf of Mexico, to the Straits of Fuca, on the northern Pacific—from the Aroostook valley to the bay of San Diego, the Union extends its leviathan proportions. The inhabitants of these extreme points, more distant apart than the shores of the old and new world on the usual routes of travel, are brothers and fellow-citizens, under common laws and with a common destiny. It is as though the Shetland Islands and the Bosphorus, Siberia and the Gates of Hercules, were made the outposts of an empire which embraced the whole of Europe. For such an empire Alexander and Caesar died in vain, and Napoleon deluged Europe in blood.

The statistics of the Union, collected by our public officers, show an annual income, realized from all branches of industry, amounting in 1848 to \$2,323,564,756. If we were to build the road in ten years, not perhaps an impossibility, and the income of the nation were not augmented, an utter impossibility, the amount *annually* expended upon the road would be about *one third of one per cent.* upon the annual income of the country. Our very *grass crop*, in a single year, would stretch the iron tracks from ocean to ocean. We sunk in the Mexican war, which seems not in any appreciable degree to have disturbed our general wealth and prosperity, an amount altogether adequate.

The expense of this road will not in any case, however, be a *tax* upon the *resources* of the nation: since very nearly the whole amount required, and eventually much more, must be realized from the sale of public lands upon its route, not otherwise capable of being brought into market for generations to come. It will be so much invited into the country or contributed to its wealth by the foreign emigrants seeking our soil.

The *fat* of the nation appears to have gone forth, in any view of the matter, for the road, and for the road *at once*. The public mind has been aroused, and, with high thoughts, approaches a subject but a few years ago universally regarded chimerical and impossible. Every day the number of skeptics, still large, continues to decrease. Committees in both the Senate and House of Representatives of the Union have reported elaborately in favor of the road. The Legislatures of nineteen or twenty states have pronounced a similar judgment. Chambers of commerce and public meetings in all our leading cities have united in the movement. Leading statesmen endorse it by speeches and correspondence. To crown

the whole, two conventions at St. Louis and Memphis, the largest ever held in the Mississippi valley, embracing delegations from nearly every state in the Union, unite almost unanimously in the commendation.

Under the main point of agreement, there are, to be sure, some diversities of sentiment regarding the route to be pursued, and the mode of construction to be adopted. It will be for the general government to say how far, under the provision of the constitution, it can go in "*providing*" for such a road, whether by donations of public lands and contracts for mail and military service, or by any other legitimate and proper aid. Does the power of the general government regarding the construction of railroads through the territories stand upon other ground than in the states? Is there power to build such a road through the territories by direct appropriations, and if so, is not all experience clear against the policy of exercising it? Can government contract for and execute great public works upon terms in any degree as favorable as individuals or companies? Are there not frauds in its agents, speculations, official patronage, and party procriptions and inconstancies to be provided against, and which are capable of protracting and indefinitely postponing the execution of the work, and augmenting, without limit, its expense? Or if the power and its exercise be left to individuals or companies, can there be any guarantee that the country shall not suffer by such stupendous rights and monopolies in their hands, and that the road will eventually and certainly be built? These matters must be left to the wisdom of Congress.

With regard to routes, the most prominent before the country are:

1. That projected by Mr. Whitney from Lake Michigan through the South Pass to the mouth of the Columbia, with a branch to San Francisco.

2. Mr. Benton's project from St. Louis to San Francisco, through some pass to be discovered in the mountains south of the South Pass, and near the sources of the Arkansas river.

3. The route of the St. Louis Convention, as announced in their official publications, and extending from that city through the South Pass, &c.

4. The Texas route, from some of her seaports to the Paso del Norte, and thence along the Mexican boundary.

5. The route indicated and specially recommended for survey by the Memphis Convention, under the following resolution:

"*Resolved*, That in the present state of our knowledge, we feel warranted in recommending to the particular attention of the general government for examination, as possessing special advantages, the route commencing at San Diego, on the Pacific ocean, crossing the Colorado on the west, running along the Gila

river, or near it, in a direction to the Paso del Norte, and thence across the state of Texas to its northeastern boundary, between the 32d and 33d * degrees of north latitude, terminating at some point on the Mississippi, between the mouth of the Ohio river and the mouth of the Red river."

This route intercepts in its course the fertile regions upon Red river, the whole of northern Texas, Chihuahua, Coahuila, &c., now almost entirely without a market. It leaves the Mississippi at a point always navigable by large vessels from the ocean, and is very nearly central to the whole Union, Memphis being about that central point. It is south of the Ohio river, and its tributaries from Pennsylvania, Virginia, Kentucky, Ohio, Indiana, Illinois and Tennessee, and, on that account, within easy control of the immense flatboat commerce of these regions. The great Mobile railroad, the Georgia, Carolina and Virginia railroads, all strike for the Mississippi valley near these points. It is in a medium climate throughout, nor likely to be disturbed by the frosts and snows of northern regions. It is several hundred miles shorter than any other route, and can be built for greatly less expense. It has less physical obstructions, and, for the most of the way to the Paso, is through a level country, supplied with every variety and abundance of timber, fertile in soil but without access to market, peopled in half its extent, and capable of dense population for three fourths of the whole distance. It is through a healthy region after leaving Red river, and connects Texas with the heart of the Union.

Should the road in any part of its course necessarily cross the Gila river, the case is provided for in our treaty of purchase from Mexico.

The western terminus of the road is at San Diego, described by Captain Wilkes as an arm of the sea ten miles in length, four miles in width, perfectly secure from all winds, with an entrance narrow and easily defended, and with a sufficient depth of water—twenty feet at lowest tides—for large vessels. Major Emory is of the same opinion: "San Diego is, all things considered, perhaps one of the best harbors on the coast." &c. "The harbor of San Francisco has more water, but San Diego a more uniform climate, better anchorage, and perfect security from winds in every direction," &c.

It is worthy of remark that this route has been advocated with great power and ability by the present chief of the Topographical Engineers, Col. Abert, and that Col. Hughes, of the army, in his late able and elaborate

letter to the Secretary of State, Mr. Clayton, written at his particular request, acknowledges a similar preference. He says:

"It is to commence at San Diego on the Pacific, and to strike thence to the Colorado, following up its affluent, the Gila, to near its source; then passing into the valley of the Rio Grande del Norte, keeping within the jurisdiction of the United States. From this point the line would pass through Texas to Nacogdoches, where Col. Abert proposes a bifurcation of the road—the one branch nearly direct to the Mississippi, above the mouth of Red river. A slight deflection from Nacogdoches would carry it to Vicksburg, or to Memphis, as might be deemed most expedient. 'The northern branch will probably find its better course to cross the Red river at the great bend, or its vicinity; then crossing the Arkansas at Little Rock, pursue its course to St. Louis; then, crossing the river, to pursue the most direct favorable course which can be obtained south of the great lakes to Pittsburg.' These two lines, when actually traced, and the work finished, would probably exceed two thousand miles. This route, with its bifurcations and adaptability to further lateral improvements and extensions, is, I think, much superior to all others, and is certainly less open to some of the objections which I have urged against them."

It is clear that a branch of this road would very soon connect with New-Orleans and the Gulf of Mexico.

If this route be practicable, and it is to determine the point we call upon government to make the necessary surveys, it is in every respect the *American* one. The north must be more benefited by a route extending southward than by one through her own latitudes, and by her own peculiar productions. Her cities might prefer the latter, but the great interest of the people will be promoted by the former. What does the north, it has well been asked, want with a road to the north! "No one can suppose that the people of Iowa would exchange flour and pork with the people of Oregon, or swap horses or cattle with them. But let them look to the south, and how different the prospect! Along the Mississippi river, at every remove, they would find the condition of barter existing all the way to New-Orleans, and throughout the West Indies and eastern slope of South America. Or, if they preferred to take the railroad at Memphis, they would daily and hourly find a market through southern climes, and, when they had reached San Diego, if any thing remained to be so sold or purchased, there would be China, at last, quite as convenient as if they were at Francisco or Astoria. More convenient would be Australasia, and Polynesia with its thousand isles; and still more convenient, and in a climate still more different from their own than any yet men-

* The author of the resolution states the 33d degree was a mistake made by him and by the committee, 34th degree having been intended.

tioned, the western coasts of Central and South America."

From the earliest periods the problem of reaching the East by shorter means of communication has engaged the attention of statesmen and of nations. In the search our continent was discovered. The northern coasts of Europe, the western coasts of America, have been explored times without number, with the same end. Every nook and corner of the continent has been examined. The Spaniards were among the most active of these explorers, and Cortez even went so far as to write to the home government, "If we should so hit upon this strait, (in the vicinity of the isthmus,) the distance to the Indies would be two thirds less than the present navigation." Soon after was invented the fiction of the Straits of Anian, or of Fuca, on the northwest of America. McKenzie and Carver traversed the British dominions from Canada to the river of Oregon and the Arctic sea. La Salle proposed to the French a possible communication from the sources of the Mississippi to those of the Oregon, and Mr. Jefferson dispatched Lewis and Clarke to these regions in search of a "route of commercial communication with the Pacific."

2. In regard to the *isthmus routes* of communication, the following resolution was unanimously adopted by the convention:

"Resolved, That while the contemplated railroad across the continent is being constructed, a present communication between the states of this Union and the American and Asiatic coasts of the Pacific ocean, of vast importance to every portion of this community, can be obtained by ship canal or railroad across the Isthmus of Tehuantepec, Nicaragua, or across them all,—which railroads or canals may be constructed by private enterprise, and this convention, in order to encourage the undertaking and completion of such works, recommends the passage of a law by the Congress of the United States, directing the Postmaster General, Secretary of War and Secretary of the Navy, to make annual contracts for the transportation of the mails, troops, and military stores of the government from the Atlantic to the Pacific ports of the country, by the shortest, speediest and cheapest route."

It will be perceived that these routes are considered as *wholly* matters of *private* enterprise, and in their character *temporary*, or at least inadequate to meet all the requisitions of the country. It will not be necessary for us to go into detail upon any of these matters, since they have been sufficiently long before the country to be very generally understood. Different preferences were expressed by members of the convention, but the body itself ventured no opinion upon the merits of either one of the routes. Several of the delegations, and more especially those

of Alabama, South Carolina, Georgia, Louisiana, and Mississippi, were prepared, it is true, with cogent reasonings in favor of *Tehuantepec*, which they represented as more immediately within the control of our navy, with harbors upon either side, of sufficient depth and capacity, or capable of being made so without great expense, and in distance less than the Panama route from New-York or New-Orleans to San Francisco by 1,200 or 1,700 miles. As this matter is now in the hands of a company prepared for immediate action, and as a committee, under instructions from a mass meeting of the citizens of New-Orleans, are prosecuting surveys and collecting information for an elaborate report, further remarks at this time would be premature. Nothing is asked but that the various routes shall have an *equal* hearing and consideration, and stand upon their respective merits. In the result they may *all* be proved practicable and adopted, since it has been found, in the experience of the eastern and western states, that innumerable communications can be opened to advantage where population and wealth are upon the rapid increase.

3. *A military road along the Mexican frontier*.—This is set forth in the following resolution:

"Resolved, That, as an important means, a necessary preliminary to the construction of a railroad, it is the first duty of Congress to take measures for the establishment of military posts from the western confines of our states, along the southern boundaries of our republic and our Indian frontier, to the Pacific ocean. That these posts should be established in all proper places, not far distant from each other, and that civilized and productive settlements should be encouraged around them by sales and grants of pre-emption rights of the public lands to actual settlers, and by such encouragement as may be deemed necessary, so that by these means ample opportunities may be afforded to our engineers for the immediate survey and reconnoissance of our possessions, lying between our western and southwestern states and the Pacific ocean, and so also that by these means safe, practical roads, one or more, with facilities of travel, may be immediately formed for our citizens, and for the transportation of troops and munitions of war, &c., across our own territories, from the Atlantic to the Pacific shores, and in order that our government may fulfil its recent treaty stipulations with Mexico."

Our government is bound by the treaty with Mexico to defend the *frontier* by military posts. These would extend from *Paseo del Norte* to San Diego, and should be continued through northern Texas for the protection of emigrants from the Comanche Indians, a distance of 200 or 300 miles. Justice and expediency seem to demand such a road and such outposts in the speediest possible time.

and it is not reasonable to suppose that their claims will be postponed.

Fellow-citizens, the age in which we live is one of great achievements in arts and sciences and in human progress. The nations of the world are engaged in the great race for position and for empire. It becomes our country to aim as high, and to realize as soon as may be that bright and glorious destiny for which God and nature seem to have reserved her.

J. D. B. DEBOW, of Louisiana,
ABSALOM FOWLER, of Arkansas,
JAMES C. JONES, of Tennessee,
J. R. STROTHER, of Missouri,
J. F. G. MITTAG, of South Carolina,
C. C. MILLIS, of Texas,
G. S. YERGEN, of Mississippi,

Committee.

RAILROAD TO THE PACIFIC OCEAN.

—I have received your letter, inviting me to attend the Railroad Convention which is to meet in New-Orleans, on the first Monday in January next. It will not be in my power to attend. Official duties oblige me at that time to be at my post at Washington.

But I send you three reports in reference to the trade of the lakes and western rivers, which may be of service to your deliberations.*

Allow me to draw your attention to a few of the facts of these reports.

The system of harbor and river improvements may be considered as having been commenced in 1806, and as having been continued without interruption, up to, and including the year 1845; and, by reference to the table, page 24, report No. 1, it will be perceived that the whole appropriations on these accounts are not more than about seventeen millions of dollars.

A second table, on the same page of the same report, exhibits the years through which this amount has been distributed. The first table on the same page names the states in which the expenditures were made; and previous pages of the same report name the particular work which was the object of expenditure. The facts of this report will remove all that class of objections to the system which depend upon the supposition that the system has been for the exclusive benefit of a few localities, and of that class of objections in which so much imagination has been indulged, in reference to the amount expended.

* These reports were made by Col. Abert, of the dates December, 1844, January, 1848, May, 1860.

GOVERNMENT APPROPRIATIONS FOR INTERNAL IMPROVEMENTS.

States and Territories.	Amount.
Maine.....	\$276,874 72
New-Hampshire.....	10,000 00
Massachusetts.....	526,148 22
Vermont.....	101,000 00
Rhode Island.....	32,000 00
Connecticut.....	160,407 26
New-York.....	1,632,115 80
New-Jersey.....	28,968 00
Pennsylvania.....	207,981 28
Pennsylvania and Delaware.....	38,413 00
Delaware.....	2,088,356 00
Maryland, Pennsylvania, and Virginia.....	1,901,227 81
Maryland.....	55,000 00
Virginia.....	25,000 00
North Carolina.....	870,377 00
Georgia.....	248,048 06
Florida.....	287,712 72
Alabama.....	204,997 60
Mississippi.....	46,500 00
Louisiana.....	717,200 00
Tennessee.....	11,920 00
Kentucky and Tennessee.....	155,000 00
Arkansas.....	486,065 00
Missouri and Arkansas.....	100,000 00
Missouri.....	75,000 00
States through which the western rivers pass, (the Ohio, Mississippi, Missouri, and Arkansas),.....	1,698,000 60
Indiana.....	1,370,733 59
Illinois.....	998,601 00
Ohio.....	2,617,661 37
Michigan.....	645,724 83
Wisconsin Territory.....	167,500 00
Iowa Territory.....	75,000 00
	17,199,223 21

AMOUNTS APPROPRIATED IN EACH YEAR.

Year.	Amount.
1806.....	\$48,400 00
1810.....	60,000 00
1811.....	50,000 00
1812.....	30,800 00
1815.....	100,000 00
1816.....	10,000 00
1817.....	4,000 00
1818.....	317,989 60
1823.....	32,920 00
1824.....	175,000 00
1825.....	176,712 00
1826.....	284,253 00
1827.....	398,541 45
1828.....	1,020,120 56
1829.....	608,560 25
1830.....	672,506 03
1831.....	926,311 84
1832.....	1,225,008 48
1833.....	1,159,451 82

1834.....	1,641,621	52
1835.....	1,352,243	61
1836.....	1,837,520	81
1837.....	1,768,218	63
1838*.....	2,087,044	16
1839.....	60,500	00
1841.....	75,000	00
1842.....	100,000	00
1843.....	230,000	00
1844.....	696,500	00
1845.....	50,000	00

17,199,223 21

It will appear that these expenditures have been diffused over nearly every state; not to the same amount in each, because, as must be evident to every reflecting mind, it is not every state which has, within its limits, harbors or rivers which require improvement, or which admit of being improved. But every state must experience the benefit of improved harbors and rivers of an adjoining state.

Much misconception has arisen in reference to amounts which have been appropriated for these harbors and rivers. Allow me to call your attention to page 25 of the report, marked No. 2. It is there stated, that the whole amounts appropriated (from 1806 to 1845) are,

For lake harbors. \$2,790,500

For the western rivers. 2,758,800

By which it will be perceived, that the whole amount appropriated and expended on these two interesting and important parts of the system, does not exceed \$5,549,300.

These facts are adapted to dissipate many erroneous impressions, and to correct many errors.

Now, if it be desirable to know how the balance of the seventeen millions over and above the amount for lake harbors and for western rivers has been expended, the information will be found in the report marked No. 1.

By referring to the facts of the report marked No. 3, it will be perceived that

The net commerce of the lakes
was, for 1848. \$93,242,633
And for the western rivers, for
the year 1849..... 256,233,820

As the "exports" of one place are presumed to be the "imports" of another, the "net commerce" is taken to be one half of "exports and imports." These latter constituting what may be called the "gross

commerce," which last would be double the amounts stated.

This idea is not rigidly correct. Without doubt, the "net commerce" is more than half of the "gross commerce." But yet it was considered the safe rule to adopt. Reasoning upon such a subject to obtain credit, should exhibit the desire of avoiding exaggeration, or of assuming conjecture as a basis of the reasoning.

The passenger trade on the lakes,
(see page 5 of the report No.
3.) can be stated for the year

1849, at, passengers 356,000

And, supposing the passengers to have a direct relation to tonnage and amount of trade, the passenger trade on the western waters may be safely stated, for the same year, at, passengers. . 1,500,000

From these facts can be inferred sound reasons why so many railroads are well supported, and why so many are required, as, without this immense internal trade, and the consequent number of passengers, these railroads would be without support.

It is considered that the lake trade alone has made necessary the railroad from Buffalo to Albany; the railroad from Dunkirk to New-York; the railroad from Albany to Boston, and the railroad from Albany to New-York. The various branches to these great roads derive their chief support from the same causes, the vast amount of internal trade and the passenger trade which it generates. The same reasoning and causes are applicable to the southern railroads. How few of these would exist, if local patronage were their sole support!

We are indebted to Europe for many of the most useful mechanic arts; but Europe is indebted to us for the great moral mechanics which best develop the energies and resources of a people, and which bring into profitable activity the industry and capacity of every member of the great body politic.

Referring effects to adequate and palpable causes, I believe it is to be demonstrated, that this rapid and immense development of internal trade, this better than the mines of California, diffusing employment, wealth, and happiness throughout our vastly extended country, is owing chiefly to the very limited patronage which has, as yet, been extended by the general government to our lake harbor and western river improvements. This patronage has populated those regions, and has thrown a vast amount of wild land into useful cultivation; because it has furnished the means by which the products of the soil can find a market, exempt from consuming charges of transportation, and in return, by increasing the means,

* The appropriation law of 1838 directed that but a portion (not exceeding one half) of amounts appropriated should be expended in that year.

has increased the wants of the cultivator and his ability to supply them.

The propriety of any particular railroad project is to be decided by reference to this great trade, in the benefits of which it will participate; and there can hardly be a project of a road, which shall form a link in the connection between the western rivers or the lake harbors and the Atlantic, which will not partake of these as well as of local benefits.

But it appears to me that this great chain will be incomplete, and its benefits be but partially enjoyed, unless the connection be formed between the Mississippi and the Pacific. Of the railroad to insure this connection I have written several letters, but probably the last is all that you would desire to read. I send a copy of this.

It appears to me that such a road, connecting with the Mississippi at some point so far south as to be exempt from interruption from ice, would make New-Orleans the great emporium for the Pacific trade.

The connection between the Mississippi end of the road and New-Orleans, as well as with other points on that river, would probably be best accomplished by steamboat. And by means of this river and the Ohio, there is no town on the shores of either which would not derive benefit from the road. Then by the lakes, by railroads, and by canals, links already exist to complete the connection inland with the Atlantic.

The subject is a vast one. It fills the imagination; and unless I am much mistaken, it would also fill the pockets of our people.

The various isthmus routes with the Pacific have occupied much attention. Allow me to send an interesting printed letter on this subject, from Brevet Colonel Hughes, of the Corps.*

But these several routes have always appeared to me open to serious objections.

1st. From the time they require.
2d. From interruptions in the continuity of the voyage, by frequent changes from land to sea, and the consequent different modes of transportation.

3d. They would of necessity become prolific sources of maritime wars, and of consequent interruptions in the trade.

4th. They are out of our jurisdiction and control.

5th. The money required in the construction of parts would be for the benefit of a foreign people and of foreign soil.

6th. In all suspensions of the trade from war or other durable cause, the inland parts

would necessarily become dilapidated or destroyed; and when these causes of interruption had subsided, there is no telling how much time and how much money would be required to restore the way to use, and to bring commerce back again to these channels, which the interruption had forced to be changed.

7th. Expenses on these routes must necessarily be great.

8th. The armed fleets which the protection of the commerce on these routes would require, would involve most serious national expenses. The nation could better afford to give half the cost of a continuous railroad from the Mississippi.

A war of one year, with its cost, and consequent losses of all kinds—a war resulting from circumstances necessarily attending any one of these isthmus routes, would probably amount to more than the making of the entire road from the Mississippi.

These isthmus routes are good temporary expedients; but the durable and really valuable route is, in my opinion, to be found only in a continuous railroad route from the Mississippi to the Pacific within our own jurisdiction. (*By Col. Abert, Top. Engineers.*)

RAILROAD TO THE PACIFIC ON THE SOUTHERN ROUTE.—I have at last been able to have those letters copied, about the road, and now send them to you. In reference to probable cost, recent information induces me to believe, that a road from the Mississippi to the Rio Grande, passing at the head of sea navigation of all the principal rivers of Texas which communicate with the gulf, could be made for less than I formerly supposed.

If we take this distance at 850 miles, and the average cost of each mile, to make the railroad complete, and bring it into use, at \$40,000 the mile, it will make the cost of that part of the road \$34,000,000.

If this part alone of the road was made, it would command all the travel. For, from the Rio Grande to San Diego, is a frontier line of the United States, on which military posts will have to be established, and roads connecting with these posts will have to be made, which will make that route passable and safe, and will occasion it gradually to become settled, and sooner or later to be turned into a railroad. But we will suppose the whole to be a railroad, and endeavor to estimate its probable cost and probable profits.

From the Paso to San Diego on the Pacific, is about 850 miles. If it be supposed that this part of the route will cost 50 per cent more than the average cost per mile from the Mississippi to Paso, it will make the average of this part of the road \$60,000 the mile, and bring the total cost of these 850 miles to

* Annexed.

\$51,000,000. Then the whole road will cost as follows:

350 miles from the Mississippi to Paso.....	\$84,000,000
350 miles from Paso to San Diego.....	51,000,000

Total, \$85,000,000

Twelve per cent. upon such an outlay would require an income of \$10,200,000. This would be a gross income, out of which all expenses for repairs, attendance, &c., &c., would have to be taken. Taking these at half the gross income, it would leave \$5,100,000 to be divided, in order to yield an income upon the stock of 6 per cent. per annum.

The question now occurs, from what sources will this road derive such an income? We will consider two sources only—travellers and freight.

1st. *Travellers*.—In my letter of the 24th September, 1849, I take these at 50 each way per day, for 350 days, and at a charge of \$68 for a through passage.

An extremely judicious friend, who has given much attention to these matters, says, that I am seriously wrong in both these items—seriously below the reality in reference to the number of travellers, and equally below what would be considered a cheap charge for the distance.

In his opinion 100 passengers each way would yet be much below the reality, and \$150 for each passenger vastly below what each has now to pay. And at these rates, and with the time saved, the road would, without doubt, command the travel of the world from the Atlantic to the Pacific. Taking these rates, the income from passengers would be \$10,500,000.

2d. *Freight*.—The same friend has remarked, that the road should be viewed in reference to the commerce it would generate and command, and not in reference to any profit from freight. That, except for passengers, it should be a free road, making no charge for freight, thereby enabling it to command the commerce of the world with the Pacific; and from this monopoly of commerce, vastly more wealth would be secured to the country than could possibly be from any profit by a charge of freight and a consequently restricted commerce.

Freight is unquestionably a serious tax upon commerce; and the more freights are reduced, the more profitable commerce must be, and the more extensive its range. But the argument of my friend is, I think, in a case like this, pushed to an extreme; and, in my opinion, the whole commerce between the Atlantic and Pacific may be monopolized and commanded by a moderate freight charge, making it vastly the cheaper of any route.

It is considered a good passage from New-

York to San Francisco, by Cape Horn, if it occupy no more than 5 months, or 150 days. Now, by the railroad route, as exhibited in my letter of the 24th September, 1849, a passenger train would move over this distance, at a rate of 20 miles the hour, in 11 days; and to San Diego in 8 days. At 15 miles the hour, it would require to San Francisco, 13 days; to San Diego, 10 days. And at the slow rate of 10 miles the hour, the time to reach San Francisco would be 17 days; to San Diego, 14 days.

Take any of these rates, and compare them with the 150 days of the usual sea voyage, and the difference is so vastly in favor of the road, as to insure to it the monopoly of the whole trade. The point then to be guarded against is, not to destroy this decided and important advantage in time by an exorbitant freight charge.

Suppose, then, that no higher freight were charged on the road than is charged on the sea voyage; then, the moneyed charge would be the same on the road as on the sea voyage, and all the difference of time would be gained by the shipper, a difference so vastly in his favor, that it must prevent all shipments by sea, and insure the whole trade to the road; and not only is there this difference in time in favor of the road, but the difference of interest upon the freight saved by time to the shipper, which would frequently be more than equivalent to the road freight charge, and make the railroad tantamount to a free road.

These considerations fulfil all the conditions of my friend's reasoning, in reference to the advantages of a free road, and yet justify a charge for wear, tear, and repairs, and for freight trains.

The average shipping freight charge is \$25* the ton, which, on 150,000 tons, would yield \$3,750,000.

By the passenger trade we have \$10,500,000
And by the freight, as above... 3,750,000

Making a total of \$14,250,000

But the income required to insure 6 per cent. upon the stock (after paying all annual expenses) is \$10,200,000: we have therefore from these two considerations (passengers and freight) an excess of four millions, which would justify a reduction of the charge per passenger to \$100 each; or it will justify a serious reduction of our supposition in reference to amount of freight trade.—(By Col. Abert.)

RAILROADS FOR ARKANSAS.—Arkansas, in point of territorial extent, is larger than any southern state, Texas alone excepted, embracing in its limits an area of over 50,000 square miles, or 33,000,000 of acres.

* With very fast sailing vessels, as high as \$40 the ton has been paid.

Her soil is one of unsurpassed fertility; the northern portion of the state, from its climate, being admirably adapted to the production of provisions, with the capacity to produce them to an unlimited extent; also embracing a belt of mineral region, rich in anthracite and bituminous coal, lead, zinc, copper, gypsum, manganese, silver, and gold—needing only an outlet by railroad to the Mississippi river, to make it a more profitable mining district than California itself, while the southern part of the state is safer for heavy crops of cotton than any other portion of the south. This is established beyond all question, by years of experience;—further south, the crop has become a precarious one, from casualty produced by the caterpillar, boll worm, grub, or cut worm. West, there is not rain enough more than one year in four, and in other states of the same parallel east, the soil is exhausted.

But Arkansas, with all that nature has done for her, is far behind her neighbors in improvements, population, and general prosperity. It is a source of humiliation to your committee to make these acknowledgments; but the truth should be told, "though the heavens fall."

The cause of this state of things, to the intelligent resident of Arkansas, who has understood her general state policy, is no mystery. She was admitted into the Union prematurely, before she had the basis of wealth and population upon which to raise a revenue to support a state government; consequently she was forced to resort to some financial scheme to raise the deficit. The state and real estate banks were chartered, and the endorsement of the state placed on \$3,500,000 of their bonds; they both suspended in the general crash of 1887; and since then have not more than managed to keep the debt down to the original amount. This constitutes the state debt of Arkansas, and the whole is set down as state liability. The state is undoubtedly liable for the entire debt; but there is still a valuable asset in the banks, consisting in notes, and in bonds and mortgages on large tracts of the most valuable lands in the state; and should these lands be affected by railroads, as lands have been every where else, there is but little doubt that before the maturity of the bonds in 1892, the debt will be paid by the bank asset. At present valuation they would pay the debt down to \$1,500,000. This, then, is the actual debt of the state—an amount for which she is at present unable to provide, but insignificant when viewed prospectively, and can easily be provided for, after a correct system of railroads shall have developed our vast natural resources.

As yet, private enterprise has done nothing efficient towards a system of railroad; and the state, as shown above, is not in a condition that her credit can be made available, as in other states, to assist in projects of improve-

ment. But an awakening spirit on this subject has recently manifested itself; and the important inquiry is heard on every hand, cannot Arkansas do something towards a general system of railroad improvement?

Private enterprise and capital stand ready to act to the full extent of their ability; yet in the present advancement of Arkansas this is not sufficient, at least so far as capital is concerned, to prosecute to completion the system necessary. The only resources we have in addition are from capitalists in other states, and the liberality of the general government in making donations of lands for railroad purposes. We think we present more than ordinary claims on the government, in our proposition to point our improvements toward the Indian country. These Indian tribes are under the protection of the government; large quantities of specie, to the amount of millions, have annually to be transported at great risk, and frequently at heavy expense, (land carriage having to be used,) to pay the Indian annuities—besides, troops and munitions of war have to be sent there to keep in proper subjection the turbulent spirit of the various tribes. Besides, a direct line of railroad, penetrating the Indian country, would do more to civilize and Christianize them, than millions spent in the usual missionary efforts. With this view we see the general government is directly pecuniarily interested in our railroads, as well as philanthropically, and possesses the same interest in ours that she does in the roads running through other new states. A donation for so much land on each side of the road, with the privilege of floating for it, would enable Arkansas to do much towards completing her roads.

In the selection of a starting point on the Mississippi river, we find central on the eastern border of the state the high lands touch the Mississippi at Helena; and it is a fact that may not be generally known, that this is the only point from Cape Jeridon to the Balize, where the high lands touch the Mississippi on its western bank. And by reference to the operations of the states on the east bank of the Mississippi, we find that all their railroads point to the bluffs for their termini: instance Memphis, Vicksburg, Natchez, and other places. This, of itself, is conclusive that high land points ought to be selected for our termini, in preference to swamp and overflowed ones, when they can be had.

Then, if we adopt Helena (the only practicable place) as the starting point of our system, we find the projected road from there to Little Rock to pass over a plain country, already a grade above overflow, (with the exception of four miles of White river bottom,) rich and fertile, with timber of the best kind for the superstructure, and with no cost for the right of way. Taking this as the first section of the main trunk for the system for Ar-

Kansas, we know of no road, in the south or west, that offers such inducements to capitalists for safe and profitable investment. This road, a distance of 110 miles, can be constructed with a T rail of 58 lbs. to the yard, at a cost of \$1,000,000.

We think we risk nothing, when we base an estimate on 80,000 through passengers the first year; this, at \$6 each, gives us \$180,000, with the certainty of an annual increase to an ultimate extent that now baffles calculation.

When we take into consideration the large extent of country that will send its produce to market over this road, and receive in return its merchandise, we at once set down the freight receipts as more than sufficient to pay the expenses and repairs; giving the receipts from passengers as profit, making 18 per cent. on the investment. And when the contemplated extensions and laterals are constructed, it will pay to an extent that ought to satisfy the most avaricious. It will also possess the advantage that, for years at least, it can have no rival. The enormous cost, and uncertainty in investment, over an overflowed bottom, will prevent any rival route from being constructed, giving to this the benefits of all the trade and travel of northern, western, and southern Arkansas; also, of south Missouri, northeastern Texas, and the Indian country, without saying any thing of its being a part and parcel of the great Southern Pacific Railroad.

From Little Rock an extension should be made to some point on Red river to meet the Texas roads pointing east—also, another from the same place, by way of Van Buren to Fort Smith, to be ultimately extended into the Indian country—a country of vast extent, and possessing, according to the report of Lieut. Marcy, the elements to make it, in proper hands, one of the finest agricultural countries that God ever made. And however much the philanthropist may regret it, he can but see that this vast region must ultimately be possessed by the white race!—be brought into cultivation, and made to play its part in support of civilization. The Indians will be forced to retire to the vast plain country of the west—a country peculiarly adapted to their migratory, hunting dispositions.

At some point, a few miles west of White river, a branch ought to leave the main trunk, and following up the waters of the White river, and crossing it at or near Batesville, continue a north course, running through the fine agricultural and mineral region of north Arkansas and southern Missouri. This will constitute the system of main trunk roads for the state. So soon as they are completed, branches will be run out at various points, tapping the different basins, and giving to each section of the state facilities of direct railroad communication with the Mississippi river.

Objections have been urged against Helena as the eastern terminus, for the system for Ar-

kansas, because it does not communicate directly with the roads now in process of construction from Memphis to the southern Atlantic cities. This objection is found, on investigation, to be trivial in its character, for to all those wishing to communicate with Memphis they are offered an uninterrupted navigation, for first class steamers, from Helena to Memphis, which can be run in five hours, making a difference of time between Little Rock direct to Memphis, and by way of Helena and the river, of not more than three hours.

By way of New Orleans is the natural outlet for Arkansas products; and when other things are equal, her artificial lines of communication (as her rivers do) ought to point to New-Orleans. With her Arkansas is allied by contiguity, association, and similarity of institutions, and nothing but the most perfect apathy on the part of New-Orleans can dis sever this unity of interest; but without New-Orleans will take hold and act liberally, the southern Atlantic cities will unite Arkansas with them by iron bonds, and then hold her as with hooks of steel. Memphis, Nashville, Charleston, and Savannah; and last, though not least, Mobile, is beginning to bid for Arkansas trade, by proposing the construction of roads to cross the Mississippi at Memphis, and even 100 miles above these; and if New-Orleans sleeps on a few years longer, she may awake, but it will be with a spasmodic effort, and she will quickly relapse again into the sleep of death, as in that time all the elements of her vitality will be taken from her by her more enterprising sisters, Mobile, Savannah, and Charleston.

Should it be found necessary at any future day to connect the Arkansas roads directly with the roads east of the Mississippi, it can be done at much less expense by crossing the river at Helena than at any other point, and connect with the New-Orleans and Nashville road at Holly Springs, Helena being on nearly an air line from Little Rock to Holly Springs. The difficulties of crossing the bottom opposite Helena are less than at any other point in the knowledge of your committee.—(By John Martin.)

RAILROADS IN GEORGIA.—GEORGIA RAILROAD ENTERPRISE.—We take the following from the Savannah Republican:

"The enterprise of the people of Georgia, unostentatiously displayed in constructing the splendid lines of railway now in operation, has astonished our brethren of the northern and southwestern portions of the Union. In railroad reports, in the public journals, in the letters of intelligent travellers, every where do we find the high estimation in which our state is held. We would not boast at this state of things; rather would we seek to show what yet is wanting to perfect the system of inter-

nal communication, so that the people of every quarter of our domain could have the same advantages which the railways now in use afford.

"We propose, in a few brief articles, to give a succinct account of the roads now in operation—how built, and at what cost—to show what lines are projected and being constructed, and what will probably be their influence—and then to exhibit a plan by which the state can, at a very trifling expense, complete a system of so general benefit, that, for a generation yet to come, no further outlay of capital will be necessary.

"The Macon and Western Railroad, the phoenix of the *old Monroe road*, first claims our notice. The Monroe road was projected to run from Macon to Forsyth, and afterward the project was extended to Atlanta, Georgia. It was a bold movement in its inception, but hazardous in the extreme; for, when its authors started, there was no prospect of a road below Macon or above Forsyth. When it was determined to build the Western and Atlantic and Central roads, the Monroe company was to form the connecting link between them, and thus was a way looked for from the Tennessee river to the city of Savannah. After many struggles, and the establishment of the present flourishing town of Griffin, the company failed—its affairs went into chancery, and the road was sold. It is now in new hands—has been completed and in operation for near three years, and is doing a splendid business. A million of dollars was lost to the people by the old company; but the new company has finished a road, worth over a million of dollars, on an outlay of not much over half a million. We shall consider the cost of the road, one hundred and one miles in length, at \$1,500,000.

"The Georgia Railroad, from Augusta to Atlanta, one hundred and seventy-one miles, was finished about three years ago. It has a branch, of forty miles in length, to Athens. It has cost, in round numbers, with all its equipments, \$3,500,000.

"The Central road, from Savannah to Macon, one hundred and ninety-one and a quarter miles, was finished five years ago. Its cost, from first to last, with its equipments, may be placed at \$3,000,000.

"The Memphis Branch Railroad, seventeen miles long, from Kingston, on the Western and Atlantic Railroad, to Rome, at the head of the Coosa river, has been finished within the last year. We do not know its cost, but it may be fairly put down at \$180,000.

"These four roads, together five hundred and twenty miles in length, were built *entirely by individual and city corporation subscriptions*. Not a dollar was ever advanced, to either of the corporations, by the state.

"The Western and Atlantic road, one hundred and forty miles in length, from Atlanta

to Chattanooga, on the Tennessee river, in the state of Tennessee, was opened to Dalton, one hundred miles, about two years ago, and will be opened to Chattanooga on or about the first day of November next. Then will Georgia have a line of railroad from Savannah to the Tennessee river, of four hundred and thirty-two miles—and a line from Augusta to Atlanta of one hundred and seventy-one miles, besides the branches to Athens and Rome. These lines will, in a brief period, be extended through the Nashville and Chattanooga road to Nashville.

"The Western and Atlantic road has been built by the state out of the public treasury. All the citizens of the state, therefore, have contributed in equal proportions to the erection of this great road—an everlasting monument of the wisdom and liberality of the state legislature. Its cost, with equipments, when completed, may be placed at the sum of \$4,000,000.

"Thus have six hundred and sixty miles of railroad been constructed and equipped within the last fifteen years at a cost of about \$12,000,000, *two thirds* of which amount have been furnished by individual enterprise and exertion, and one third by the state.

"Of the skill and perseverance displayed in these truly great works, or of the effects of the roads on the prosperity of the people, we need not say a word. *The roads shall speak for themselves.*" (1850.) (See GEORGIA.)

RAILROADS IN FLORIDA, 1852.—

Whereas Georgia, with her vast system of internal improvements, has already stretched her iron lines to within a short distance of the Chatahoochee—and a bill is now before the legislature of that state to insure the completion of the Southwestern Railroad from Macon to Eufaula, Fort Gaines, or other point on said river; it is therefore expedient that, to complete the chain of roads from the seaboard of the Atlantic to the Gulf, a line commencing at the point at which the Southwestern road will terminate, running thence to the waters of Pensacola Bay, should be established.

The distance of this proposed railway is about one hundred and forty miles, passing through the counties of Barbour, Pike, Covington, and Conecuh, in Alabama, and Santa Rosa in Florida, over a country admirably adapted for the purpose.

There are no large streams to cross, and the lands, for a great portion of the way, require but little grading; it can, therefore, be built at less than the ordinary cost of roads in the south. The advantages to be derived by New-Orleans and the states bordering on the Gulf, from the completion of this road, are great.

A daily line of steamers, from the terminus to the city, would bring a great portion of the Atlantic and Pacific travel hither; the cotton-

growing regions of Alabama, Florida, and Georgia, in the vicinity of the route, would make this their great mart; in return, they would receive the products of Louisiana, and those of the broad west; therefore, New-Orleans would be benefited by this route, and the roads which she proposes strengthened by the connection. The link, to complete the chain, could be made; and the states bordering on the Gulf would feel the benefits of its influence, before other more extended routes can be completed. It would open a district of country, where lands are now comparatively valueless, which would be of great advantage to our national government.

Government, having spent millions for the naval station at Pensacola, should encourage this enterprise, as it will be found necessary to secure every facility for her great improvements. The power possessing the harbor of Pensacola, as a rendezvous in time of war, holds complete control over the trade and commerce of the Gulf. Hence, a vast amount has been wisely expended in constructing fortifications at the entrance of the bay, and that point must ever be one of great importance in time of war. And as the Southwestern Railroad of Georgia have determined to seek a continuation of their line to some point on the Gulf of Mexico—

Therefore, be it *Resolved*, That the projected road from the terminus of the Southwestern road of Georgia, to the waters of Pensacola Bay, would greatly promote the interests of the south, and receive the cordial sanction of this convention.

2d. *Resolved*, That we earnestly recommend to the favorable consideration of the national government, this railway, as one which will be highly important to the naval station at Pensacola, and to the security of the increasing commerce of the southwest.

3d. *Resolved*, That the members in Congress, from the several states, are solicited to use their efforts to obtain suitable grants of the public domain for this connecting link between the Atlantic and the Gulf, and for all similar purposes of public enterprise and improvement.

RAILROADS.—MISSISSIPPI ROUTES.—The undersigned begs leave to submit to the General Committee on Routes the following report in support of the resolutions offered by him to the convention in relation to a system of railway running from the city of New-Orleans through the state of Mississippi. It cannot be doubted, that the system proposed by the resolutions, when completed, would not only be of incalculable benefit to the citizens of Mississippi and Louisiana, but would also afford to the city of New-Orleans a full and complete communication with all the railroads east of the Mississippi river. The undersigned believes that he cannot do greater

justice to the present condition and general importance of the Brandon and Montgomery Railroad, than was done it in a report made upon the subject, by a delegation of the citizens of Vicksburg, at the R. R. Convention, held in this city in April last. That delegation stated, "that this road is to extend from Jackson, Mississippi, to Montgomery, and will connect at Selma with the Alabama and Tennessee River Railroad, by which, and the roads now under contract, and in contemplation, a continuous railway communication will be opened through Tennessee, Kentucky, and Ohio, with the lakes; and through Tennessee and Virginia, with the Atlantic and northern states, and at Montgomery will connect with the railroads running east through Alabama, Georgia, and South Carolina. It will pass in the state of Mississippi entirely through the counties of Rankin, Scott, Newton, and Lauderdale; and in Alabama, before it reaches Selma, one of the termini of the Alabama and Tennessee River Railroad, it will pass through Sumter, Marengo, Perry, and Dallas counties. Nearly all these, and the contiguous counties, both north and south, now haul in wagons their cotton and other articles of export to the Tombigbee and Alabama rivers, and ship thence to Mobile. The counties of Sumter, Marengo, Green, Perry, and Dallas, produce annually about 150,000 bales of cotton, all of which now goes to Mobile, but much of which will probably be turned to New-Orleans by means of this road. In fact, nearly all the products of east Mississippi and western Alabama, and their supplies for that region of country, will probably find their way on this road, and the branch extending through the northeastern part of Mississippi. The southern route then will become the great thoroughfare of northern and eastern travel. It will develop the mineral resources of north Alabama. Its rich and inexhaustible mines of iron are now worked in spite of the difficulties of getting to a market; and it will create and open a way to trade, the vast extent of which cannot be too highly estimated. We think it within bounds to assert, that 200,000 bales of cotton will come over this road, and the branch extending through the northeastern portion of Mississippi, to New-Orleans, not one bale of which now ever reaches it. Detailed estimates, made by an engineer who has surveyed the route from Brandon to the Alabama line, of the amount required for the completion of the road that far, are in our possession, and may be set down in round numbers at one million of dollars. If New-Orleans were to pay the whole cost of building the road that far, it would return to her in the increase of trade alone, without estimating the other advantages, a handsome profit upon the investment. But there are inducements to render the stock of this road valuable, that are not

presented to any other railroad in the United States. From Jackson to Brandon—fourteen miles and a half—the road is completed and in profitable operation. These fourteen and a half miles, with the cars, locomotives, fixtures, depots, town lots, &c., attached to the road; sixty choice and picked negroes; the two per cent. fund now on hand, being about \$12,000, and that which may hereafter be received, now the property of the state of Mississippi, and valued on a careful estimate by the President of the Southern Railroad, including the grading east of Brandon, at \$378,000, are all offered by a recent act of the legislature, as a bonus for the organization of this company, and the completion of the road to the Alabama line in six years. This act was passed in 1850, and provides that the whole property shall come into possession of the company so soon as twenty miles of the road beyond Brandon shall be finished. To organize the company requires a subscription of \$500,000 of stock, with a cash payment of \$50,000, immediately upon which the company becomes the owner of nearly half a million of valuable and active property. This statement shows of itself a conclusive inducement to take stock in this road, and renders it absolutely certain that it will be valuable."

Your undersigned fully concurs in the opinion expressed in the foregoing report, that this road is of incalculable importance to New Orleans. By it, so soon as the Jackson and New-Orleans Railroad is completed, an inland highway of commerce and travel is at once effected between New-Orleans and the whole of the southeastern portion of the United States; by it an immediate junction is effected with the great system of railroads in Alabama, Georgia, and South Carolina. By this road, in connection with the Selma, the Hiwassee, and South Valley railroads, New-Orleans will find her most direct and speedy route to the whole of the northeastern and eastern portion of the republic. By it a connection is made with the Nashville and Chattanooga Railroad, and thus will New-Orleans be placed in immediate contact with Louisville, Cincinnati, and the lakes. Your undersigned does not deem it necessary to add more upon this subject, than simply to say, that a large portion of the stock in this road has already been taken by citizens of Mississippi, and that a little assistance from New-Orleans will, in a short time, place the work, throughout its whole length, in process of construction.

In reference to the New-Orleans and Nashville road, the undersigned can add but little, if any thing, to what has already been said or written in its favor. For nearly twenty years this road has been the favored project of New-Orleans, Nashville, and the intermediate points. It has enlisted to its support the talent and ability of the states of Louisiana,

Tennessee, and Mississippi. But its advocates might now find in this convention the most forcible and *visible* argument in its favor that could possibly be presented. The seats prepared for the delegates from Nashville, Cincinnati, Pittsburg, and St. Louis, are now vacant. They speak in mute eloquence to the reason and judgment of this convention. They seem cold and cheerless, like the icy chains that hold back their occupants. A warning whisper is heard from them to this city, and they tell her that the greatest exporting commercial emporium of the New World may well fear for her future destiny, when the winter's frost or the summer's drought can bar her from the sources of her wealth and power. New-Orleans has listened to this warning, and she is sensible of the importance of this work. This road would bring to this city, for the present, more commerce and traffic than any other branch of her contemplated system of railways. It penetrates one of the most extensive, rich, and fertile portions of the state of Mississippi. The commerce of the Tombigbee valley, along which this road will run for a considerable distance, is worth more than ten millions of dollars annually. This valley, with all its wealth, population, and resources, is now the forced tributary of Mobile. The construction of this road will give to that commerce a new direction, and place it upon the wharves of New-Orleans. Not only is the commerce of this section of country considerable, but it presents inducements for the construction of a road that can scarcely be found in combination on any other route. Its population is wealthy, industrious, and public-spirited. Its prairie surface is so level, that grading would scarcely be required for some seventy miles. Nature seems almost to have prepared it for the superstructure of the railway. New-Orleans must certainly be false to her best interests, if she neglects this road thus piercing a country presenting an inviting surface for its track, wealth to construct, and commerce to support it. What has been said of Mississippi may with equal propriety be applied to Tennessee. This road would penetrate the wealthiest section of the latter state. It would call back to this city the highly valuable commerce of middle Tennessee, which is now seeking a market at Charleston. The cotton, wheat, tobacco, provisions, and mineral products of that section of the country, would be transported over this road, and with the cotton and trade from Mississippi, would actually add to the commerce of New-Orleans, in value, not less than twenty millions of dollars annually. Much of the light but valuable commerce of Nashville, about to pass by Chattanooga to Charleston, will be retained for your city. The merchant and citizen of Nashville must find a more speedy and *certain* route to his exporting and importing city than

that afforded by the uncertain navigation of the Cumberland River. If this road is not constructed, Nashville will inevitably turn her attention to Charleston. The construction of the Nashville and Louisville Railroad will complete the link in this great chain that will place the commercial tributaries of Lake Erie within the influence of New Orleans. By this road, and the Mississippi and Ohio rivers, New-Orleans can become the successful rival of New-York and Boston, and call back the millions of commerce that has left her for these cities.

This road will pass through the eastern portion of the manufacturing country of the central west, and bear over its track a large portion of the products of the spindles and looms that must soon be found there. Whilst the undersigned believes that the commerce of this road would be highly valuable as a source of revenue to the road, he is satisfied that the travel upon the road would be not only an inexhaustible source of revenue, but would contribute greatly to the wealth of New-Orleans. Ohio, Indiana, Kentucky, large portions of Tennessee and Mississippi, would send their population over this road to this city. The man of business or pleasure, from the eastern and northeastern Atlantic seaboard, *whilst in the west*, would find here his speediest and safest route to New-Orleans. By means of the railways extending to and circling Lake Erie, Boston and New-York would be placed within some three days' journey of the wharves of this city. By this road, and the railways projected and constructed across the mountains, our citizens would be speedily and safely transported to Washington, Baltimore, and Philadelphia. What would be the effect of all this upon New-Orleans? Her now vacant houses would be filled with active tenants. Her shops would be crowded with the talent and beauty of other states, who would spend millions in the city, and give to her additional thousands of active and industrious citizens. New-Orleans would cease to be the mere distributor of the wealth and commerce of other ports. She would become a *producing* city; and the manufacturer, the mechanic, and the artisan, would join with the merchant and the banker to enrich and populate the city of his adoption.

In reference to the railroad proposed in the resolutions, running from Canton northwardly and centrally through the state of Mississippi, the undersigned will give some deductions made by him from reliable statistical information now before him. The citizens of Mississippi, living upon the line of this road, have evinced during the past year a deep interest in its construction. They have ascertained the length of the road to be about 178 miles, and that the cost of its construction and equipment will not exceed one million seven

hundred and fifty thousand dollars. The number of bales of cotton grown in the counties through which the road passes was, in 1850, one hundred and fifty-seven thousand four hundred and eighty-eight bales. The population of the counties amounts to 124,231. It is estimated that not less than 93,081 bales of cotton will pass annually over the road. The income derived to the road from this source alone, at an average cost of 95 cents for transporting each bale, is \$88,379, which, with a return freight of like amount, would yield annually to the road \$176,758, for freights alone. This estimate is based alone upon the conveyance of cotton and return freights, exclusive of the products of the dairy, the farm-yard, the orchard, and the infinite variety of commercial products, which would be raised in a section of country so highly favored by nature as central Mississippi. At some point on the northern boundary line of Mississippi this road would cross the Memphis and Charleston Railroad; and whenever this is effected, the number of passengers that would annually pass over the road could not fall short of 50,000. The undersigned is satisfied from the statistics before him, that this road would yield a net revenue, derivable from the sources above indicated, of not less than thirteen per cent. upon the capital invested. Such would be the results from this road, were it never extended beyond the connection with the Memphis and Charleston road. It is not, however, designed by the friends of this measure that it shall stop short of some point on the Ohio River near Cairo. Who can then estimate its importance and value? It is estimated that in 50 years one *hundred millions of souls* will *people the Mississippi valley*. To the heart of this great empire this road is to penetrate. It will there connect, intersect, or cross all the arteries and trunks of that stupendous system of railway, extending from the Atlantic seaboard to the great west. Every important city of our republic is stretching forth its iron arms to this point, and to this point is this road to be directed. It will rob the Mississippi of the half million of human beings that are annually borne on its surface. At the mouth of the Ohio will be given the traveller a choice as to the mode of his transit to your city. Who can doubt as to his choice between the "floating palace" and "the flying car?" The expense will be the same, but expedition, safety, and comfort will all range themselves with the locomotive.

Not only will the travel over this road be great, but the commerce upon it will be almost invaluable. But little is yet known of the resources and wealth of the central west, but that little promises a complete revolution in the manufacturing world. On the banks of the Ohio, the Wabash, and the Illinois, will be found the spindle and the loom, that

will rob Manchester and Lowell of their strength. Food is found there in the greatest abundance, and cheaper than any point in the known world. The coal bed of the central west will yield inexhaustible quantities of fuel, at a price of half the cost of the same article at Manchester or Lowell. Water for dyeing is found as pure as that of the Mersey or the Merrimack; madder, the principal ingredient for coloring purposes, can be grown there as cheaply and abundantly as any point in the world; quercitron and sumac are abundant; fine clay and stone for building is inexhaustible; and last, but not least, cotton can be delivered there at 15 per cent. less cost than at either Liverpool or Boston. These are not the only advantages which this region will possess. In a few years an immediate and direct communication will be opened by railway with every important city on the Atlantic seaboard, giving her facilities of placing in her factories the few light articles not found there, and of sending to all parts of the country the products of her spindles and her looms. How can Lowell meet and vanquish this competition! She obtains her cotton from the interior of the Mississippi valley, through New-Orleans. Her coal is dug out of the mountains of Pennsylvania. Her food and flour are carried from the great grain-fields of the north and central west. Her dye-stuffs are imported from Europe and South America, and then the product of her looms are sent for distribution to the very points from which she draws her cotton and her food, her flour and her coals. England and New-England, the mother and the daughter, must yield for ever the sceptre of manufactures to the sons of the central west. From this point, over this road, through New-Orleans and across the Isthmus, must pass the fabrics that will clothe the millions of Asia. Who can doubt, then, the importance of this road to New-Orleans!

The undersigned does not deem it necessary to say any thing in relation to the benefits which would be conferred upon the sections of country through which these roads would respectively run. This point is daily discussed by both people and press, and the benefits to all classes of citizens fully understood. In the construction of the system of roads presented by the resolutions, the state of Mississippi is deeply and vitally interested, and aid from her will be necessary for their completion. It is believed that aid will be furnished from her ample internal improvement fund.—(*H. W. Walter.*)

RAILROADS IN MISSOURI, 1852.—The Atlantic and Pacific Railroad, (being a continuation of the railroads from Boston, New-York, Philadelphia, Baltimore, and other cities on the Atlantic coast, westward through the states of New-York, Pennsylvania, Ohio, In-

diana, and Illinois,) commencing at St. Louis, on the Mississippi river, and running thence southwestwardly to the western limit of the state of Missouri, with the expectation that the same will be continued across the plains to California and the Pacific ocean.

The Hannibal and St. Joseph Railroad, connecting with Chicago and the great lakes, commencing at Hannibal, on the Mississippi river, and terminating at the town of St. Joseph, on the Missouri river, with the expectation that the same will be extended so as to intersect the Atlantic and Pacific Railroad.

These two roads have been commenced under very favorable auspices, and are now in progress of erection.

The Missouri Central Railroad, commencing at St. Louis, and running northwestwardly to Jefferson City, Boonville, and Lexington, on the Missouri river, and extending to the town of Kansas, at the mouth of the Kansas river, with the expectation that the same will intersect the Atlantic and Pacific Railroad.

The Iron Mountain Railroad, commencing at the city of St. Louis, thence to the Iron Mountain, in a southern direction, and continuing in that course to intersect like improvements in the state of Arkansas, in order to connect with the Southern Pacific Railroad.

The Southwestern Railroad, commencing at the city of Cape Girardeau, on the Mississippi river, to the city of Boonville, on the Missouri river.

RAILROADS IN TENNESSEE.—TENNESSEE RAILROAD.—*SIR:* You request my opinion as to the plan of improvement best to be adopted by the state and people of Tennessee.

Controlled as this must be by the shape of the state, the directions of the mountains and rivers, and the manner in which the improvements of adjoining states approach us, there is but one general system to be adopted, and fortunately, I think, public attention has been directed to it; which is to start at the terminus of the Lynchburg and Tennessee Railroad, on the Virginia line, and pass down the Tennessee river, (for you can go no other way to or near Knoxville,) and on down Calhoun or Cleveland, and there with a southern branch meet directly the Georgia improvements. From the point of divergence at Calhoun or Cleveland proceed directly to Chattanooga, there to meet the Nashville and Chattanooga road, and possibly the Selma and Tennessee road from Alabama.

Thence to Nashville by the Nashville and Chattanooga road, or on or near the route recently examined and reported upon by Mr. Hazelhuret, civil engineer, to the Mississippi river, at or near the upper part of Madrid Bend, bordering upon the Kentucky line. This route would be nearly 600 miles long, from one extreme to the other of our state.

I think it is the most important for the state at large, as it connects directly all divisions, and will obliterate all sectional feelings.

The road will run in a proper direction also to meet and transport the products of the valleys of the upper Mississippi, Missouri, and their tributaries, to the Atlantic, by the shortest route that can be made to Charleston or Savannah, and the next shortest to Richmond, Virginia, and over routes that can carry the trade cheaper than any other connecting the Mississippi and Atlantic, as it will be the shortest and much the most economical of construction. This trunk line will be composed of the following roads:

	MILES.
The East Tennessee and Virginia road, from Knoxville to the line.....	130
That part of the East Tennessee and Georgia road lying between Cleveland or Calhoun and Knoxville.....	80
Chattanooga and Cleveland, or Calhoun, say.....	40
Nashville and Chattanooga Railroad..	151
Nashville and Mississippi Railroad....	170
Making whole length from Mississippi river to Virginia.....	571

The next most important line of improvements for our state is the one from Louisville, Kentucky, crossing into Tennessee, in a direction to Nashville, as now contemplated, by Louisville, and passing southwestwardly to the big bend of the Tennessee river, at or near Hamburg, where it will at no distant day be met by the Mobile and Ohio road, and the New-Orleans and Jackson road, and from thence on or within the state to Memphis. This route will connect the extremes of latitude, and reap a rich reward from carrying the products in exchange from south to north, and north to south, as well as the travel each way. Cincinnati, Ohio, is also reaching out, and will connect finally with this line, in Tennessee, probably in Sumner county. The means are already provided to come from Cincinnati by Lexington to Danville, Kentucky.

	MILES.
Length of this line from Kentucky line to Nashville.....	45
Nashville to Tennessee river, at or near Hamburg.....	125
From Hamburg to Memphis.....	125
Making the total length from Kentucky line to Memphis.....	295

The third and next most important road for the state is the Mobile and Ohio road, passing from the point at or near Hamburg across West Tennessee by Jackson, and in a direction towards Cairo, at the mouth of the Ohio, and this line will pass centrally through West

Tennessee, and accommodate all the counties not convenient to the Tennessee and Mississippi rivers.

Length of the line across the state	185 miles.
Add the lines from Kentucky line to Memphis.....	295 "
Virginia line to Madrid Bend.....	571 "
	1,001 miles.

Of these lines of improvement, the following parts, it is thought, the means for the construction is provided:

Nashville and Chattanooga Railroad.....	151
East Tennessee and Georgia, between Calhoun and the place of crossing Tennessee river.....	40
	191 miles.

Leaving to provide for, wholly or in part.....	810 miles.
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This will make up, when completed, a most complete and comprehensive system of improvement, on which all short roads can concentrate and make a perfect network. These artery lines it is expected the state will aid, by loaning her bonds to such companies as have finished sections of 10 or 20 miles, as may be required, to an extent sufficient to buy and lay down the iron, and build the depots and station-houses, and equip the road, when the grading, bridging, and tenders have been prepared ready for the iron. The state to take a clear mortgage to cover her outlay of say \$8,000 per mile, which completes the road for full service.

The state, of course, would require the road so prepared to be accessible to some other road or to some navigable water-course, and to be a part of this great system. 810 miles of road, at \$8,000 per mile, make \$6,480,000, most of which would not be called for very soon, as it could only be demanded as the work was finished, the people's money having to go at the bottom.

There are other railroads building and starting that do not come within this system. One done, or at least that part of the East Tennessee and Georgia Railroad lying below Calhoun, which is finished... 40 miles in length.

The Winchester and Huntsville Railroad is now being located, with means to build it provided.... 28 miles long.
The McMinneville branch road, partly provided for, 30 miles.
And the Shelbyville branch nearly done, and means to finish it..... 8 miles long.

Making in all..... 106 miles of branch roads, or roads outside of these trunk lines,

and 68 miles of them growing directly out of the Nashville and Chattanooga Road.

Your obedient servant,

V. K. STEPHENSON.

RAILROADS IN ALABAMA.—THEIR VALUE AND PROFITS; PUBLIC LANDS AND PROJECTED RAILROADS OF THE STATE OF ALABAMA, &c.—ADDRESS OF THE STATE INTERNAL IMPROVEMENT CONVENTION TO THE PEOPLE OF ALABAMA.—In fulfilling the duty assigned them by the State Internal Improvement Convention, held at Mobile, on 29th May last, the undersigned committee feel persuaded that no question can be presented to the people of Alabama, at this time, of higher importance, or more worthy of the earnest and profound consideration of every citizen, than the subject upon which they have been appointed to address you.

The age in which we live—marked as it has been by brilliant discoveries and valuable inventions, in nearly every department of industry—witnesses, in the creation of the railway and the locomotive, the most powerful instrument of human progress the world ever saw. Scarcely twenty years have elapsed since the first locomotive traversed its iron track upon a short road in Great Britain. To-day, five thousand miles of railway exist in that kingdom alone; to provide which has cost the nation an enormous expenditure—over twelve hundred millions of dollars. In America, the astonishing results that followed the completion of the Erie Canal prepared the public mind to undertake further improvements, and the states of the north and east, with the sagacity and foresight which have ever directed their local legislation, have been foremost to provide a complete and extended system of railway communication, converging to their principal commercial ports. From 1834 to 1851—only seventeen years—the states of New-England and New-York have constructed and put in operation more than four thousand miles of railway, costing one hundred and sixty-six millions, or an average of about forty thousand dollars per mile. In the earlier stages of railway experience it was supposed that railroads could be sustained only in thickly settled and compact districts, or connecting populous commercial towns. But, as the immense creative power of railroads became manifest by the rapid growth in population and wealth of those districts into which they had been extended, confidence in their adaptation to the wants of the country increased, and the New York and Erie railway—the most magnificent undertaking of modern times—has been finally completed within the present year; seven eighths of its whole length of 467 miles having been constructed since 1845. The country through which that great work was

projected, presented formidable obstacles to the engineer, from its rugged and mountainous surface; and, being sparsely settled—containing at that period only 257,000 inhabitants—gave little assurance of profit from local traffic. Yet, in 1849, less than half, or 214 miles, of the road having been opened, through a region which numbered in 1840 a population of less than 136,000 souls, more than 182,000,000 pounds of freight were transported over it, furnished by the country along its line. Immense as was the sum required to build the New-York and Erie Railroad, (\$23,000,000,) the benefits already derived from its construction have exceeded the warmest anticipations of its advocates, and would have justified a much greater expenditure. It is computed that the real estate of the counties contiguous to the line of that road has been enhanced upwards of twenty-five millions of dollars in value, or two millions more than the entire cost of the work, and within twelve months of its final completion.

In 1850, the total length of railways in the United States exceeded 8,200 miles, costing \$205,000,000. Of this, 5,462 miles, costing 140 millions, have been built since 1840, and new lines are progressing in various parts of the Union, at the rate of about 2,000 miles per annum. Four thousand miles now in operation are, as we have seen, situated in the New-England states and in New-York. Of the remainder, about 1,000 miles are connecting or tributary lines in other states, converging to the two great commercial cities, New-York and Boston. The latter has developed, perhaps more fully than any other city, the wisdom of liberal expenditures for purposes of internal improvement. The people of Massachusetts, through private subscription and reasonable state aid, were enabled, between 1835 and 1850, to contribute 53,864,000 dollars to perfect a railway system within her borders, which, in 1850, yielded a net income of \$3,480,000; being six per cent. upon the cost, \$45,000 per mile. Aside from this direct profit upon the capital invested, a remarkable illustration of the collateral advantages of railways is afforded by a comparison between Boston in 1840, and the same city in 1860.

In 1840, Boston and towns adjacent, embracing a district of about nine miles in breadth by sixteen miles long, contained a population of 172,000.

In 1850, the same district contained 293,000, showing an increase of 121,000, or 70 per cent. in ten years, while for the previous decade the ratio of increase was less than 45 per cent.

The assessed valuation of property in this district in 1840 was \$120,000,000; and in 1850, \$266,500,000, an increase of \$146,500,000, or 122 per cent. in ten years of actual

wealth in a single district of the state, created by an outlay of a little more than 52 millions of dollars.

That this is not an inflated or speculative increase, but a healthy and substantial improvement in value, is evident when we examine the sources from which such unparalleled prosperity has arisen.

The freight earnings of railroads leading into Boston were—

For 1839.....	\$287,000
For 1849.....	1,238,000

The number of vessels clearing from Boston for foreign countries, in 1840, was 1,574, making 225,416 tons.

The number of vessels arriving from foreign countries, in 1840, was 1,719, equal to 286,366 tons.

The number of clearances from same port for foreign countries in 1850, was 2,839, or 437,760 tons.

The number of vessels arriving from foreign countries in 1850, 2,872, or 478,859 tons.

Thus, while the tide of produce rolling into Boston over her "iron ways" has swollen 332 per cent. in ten years, her foreign commerce has nearly doubled itself in the same period. The state at large has likewise participated in the upward movement. The assessed valuation of property in Massachusetts, for 1840, was \$299,879,000, and, in 1850, reached \$590,582,000, being an increase of \$290,653,000, or nearly 100 per cent. added to her taxable property in the last decade; an amount equal to five and a half times the cost of all the railroads in the state. From 1840 to 1850 she has also gained 256,600 in population, an increase of 35½ per cent.; while from 1830 to 1840 the increase was but 21 per cent, making a gain of 18½ per cent. in the ratio over that decade.

In the other New-England states, property and population have steadily and uniformly kept pace with railway extension. Pennsylvania, Maryland, and Virginia, stimulated by the successful enterprise of their more northern neighbors, are cutting through the Alleghanies to draw nearer to themselves the fertile regions of the western valley. The states of the west, meanwhile, directing their eyes to the Atlantic coast, are spreading a net of railways, pointing always eastward, to meet the advance from that quarter. Such is the energy with which these improvements are prosecuted, that, within three years, five parallel lines of railway will be in active operation in the north, stretching in a continuous chain from the Atlantic cities to the banks of the Mississippi, and only pausing there until the new station west of that river shall gather strength to carry them onward still further towards the Pacific. Every additional mile

thus opened for traffic expands the area of eastern commerce, and moves further south the dividing line from whence the valley seeks an outlet for its produce by the Mississippi to the Gulf.

While the enterprise of the north and west has furnished thus far 6,000 miles of railway in addition to the numerous facilities for inland transportation previously existing, the states of the south have embarked slowly, and with extreme caution, in similar improvements, and up to 1851, have put in operation about 2,000 miles of railway; 900 miles of which, or nearly one half, are within the limits of Georgia, and about 85 miles in Alabama.

Georgia, the only southern state which can be said to have a complete railroad system, presents an example full of wisdom and instruction to her sister states—a lesson by which many of them are endeavoring to profit. Before the commencement of her railroads, Georgia suffered a large and an increasing drain, from the emigration of her people with their property to the new states. With a soil nearly exhausted by improvident culture, and steadily depreciating in value—her towns and villages participating in the general decay, and every interest languishing—her future prospects seemed gloomy indeed. But as her lines of improvement penetrated the interior, providing speedy channels of communication with the principal markets, the efflux of population was arrested, a general spirit of enterprise began to pervade all classes, and this noble state at once started forward upon a new and unexampled career of prosperity. Every pursuit has felt the revivifying influence, and all branches of manufacturing and mechanical industry flourish to a degree hitherto unknown among us. This revolution has followed the expenditure of fourteen millions of dollars, upon judiciously located railways, which are earning from eight to sixteen per cent. per annum profit to the stockholders upon their cost, while the taxable property of the state has increased in 1850 to upwards of \$335,600,000, being almost double the valuation before the commencement of her public improvements, and \$143,000,000 more than the taxable property of Alabama in 1849.

It was impossible that Georgia should reap this abundant harvest from her enterprise, without exciting the emulation of her sister states; and accordingly we find that, with the exception of the Gulf states, the entire south is benefiting by her experience; and where individual effort is found too feeble, the strong arm of state is readily put forth in aid of purposes so important to the common weal.

Such being the present position of railway enterprise in this country, it remains for us

to inquire in what manner Alabama is to be affected by the improvements of her neighbors, and what will be their bearing upon her future prosperity.

Alabama contains an area of 50,000 square miles, or 82,500,000 acres, being equal in size to the state of New-York, and embracing an unusual proportion of fertile and excellent soil. Her population in 1820, the year of her admission into the Union, was only 128,000. After that period, however, the attractions of the new state induced a large immigration from the older states, and her most accessible lands were rapidly settled. From 1820 to '80, the census returns show a positive increase of 181,000, or 142 per cent. in ten years.

From 1830 to 1840, the positive increase was 282,000, or about 91 per cent. for the decade.

The quantity of public lands entered by private occupants during ten years, from 1820 to 1830, was 1,544,000 acres—and from 1830 to 1840, was 7,048,500 acres.

As soon as that portion of the state most desirable from its contiguity to the rivers which furnished the only outlet to market, was fully occupied, the sales of public lands began to decline, and for the ten years from 1840 to 1850 only 888,000 acres passed into private hands and became subject to taxation. The same cause served to check the flow of population from abroad; and, by the census of 1850, it is found that the ratio of increase for the previous ten years had fallen from 91 per cent. to about 30½ per cent., the actual gain since 1840 being 180,500 souls, which is 101,500 less than for the previous decade, and 500 below the increase from 1820 to 1830.

Of 82,500,000 acres comprising the territories of Alabama, but 15,000,000 acres were in the possession of individual owners in 1850; the residue, 17,500,000 acres—more than half the area of the state—being still in the hands of the general government. The comptroller's report for 1849 makes known the fact, that 12,000,000 acres only of the 15,000,000 acres of private lands are assessed for taxes, having an average value of \$3.98 per acre; thus showing that nearly two thirds of the lands of the state fail to yield any revenue whatever to the government.

The average quantity of public lands absorbed in Alabama, during the last five years, has been about 80,000 acres per annum, and this average is continually diminishing. Supposing, however, these lands should be taken up hereafter at the same rate, 220 years would expire before the federal title of the lands now remaining unsold would be finally extinguished. But as 15 millions of acres of these lands have already been twenty years in market without finding purchasers, the prospect of their cultivation

under present circumstances is exceedingly remote.

This, then, is the condition of Alabama in 1851. Reasoning from the statistics here presented, there is good cause to apprehend that our state has reached, if she has not yet passed, her culminating point. The south Atlantic states, which have hitherto greatly contributed to swell the population and wealth of Alabama by emigration, are not only retaining their people at home, by the superior facilities of intercommunication which they have provided, but are themselves, in turn, becoming recipients of the emigration from less favored districts.

On the west, Texas, with her boundless acres of rich and productive soil, suited to all the varied products of southern agriculture, invites settlement at a trifling cost; and our most valuable citizens are daily leaving Alabama with their families and property, to seek homes in the valleys of the Brazos, Trinity, or Colorado. Without some powerful counteracting agency, this evil must continue to increase, eventually impoverishing the state and diminishing her population.

A few years ago Georgia sought a remedy against depopulation through the establishment of railways, with such complete success, that she enjoys to-day the proud distinction of being considered the "Empire State of the South." Alabama has attained the period in her history when it becomes necessary for her also to guard against a similar evil. The rapid progress of improvements in adjoining states, not only increases the magnitude of the danger, but renders the necessity for exertion on the part of our state doubly urgent, lest that portion of her produce which now finds an outlet at her only commercial port, Mobile, shall be divided among themselves by our enterprising neighbors, and contribute to swell the tide of their prosperity at the expense of our own. As has been already stated, "the question is now settled, that a state without railways will not only fail to increase in corresponding ratio with other states possessing these improvements, but she must actually retrograde in proportion to the inducements held out by her neighboring states to attract population to themselves."

The experience acquired by the practical operation of extensive railway lines in various portions of the country, during the last ten years, furnishes a safe guide in examining the prospects of projected enterprises, and estimating their probable success. Although, save the application of a portion of the Internal Improvement Fund appropriated by Congress for the purpose, this state has given no encouragement to the construction of railways within her borders, yet individual efforts have not been wanting. The Montgomery and West Point Railroad—the pioneer improvement of Alabama—extending 85 miles

to the Georgia line, after encountering numerous difficulties, is now, through the well-directed energies of its managers, in successful operation, and earning an income of 9 per cent. on its capital. In 1848, the cause of improvement received a new impetus in the organization of the Mobile and Ohio Railroad Company, for the purpose of making a railway connection between the gulf at Mobile and the Mississippi valley at the mouth of Ohio river. This stupendous work, the longest in the Union under a single charter, will be 521 miles in length when completed, traversing four states, and crossing six degrees of latitude in its course to the Ohio, where it will connect, by the Cairo and Chicago road, with a series of intersecting lines, embracing over two thousand miles of road already completed or in progress, extending to all the states of the northwest. Operations were commenced in October, 1848, at the Mobile terminus, and thirty-three miles of the road will be in operation in December next.

The Alabama and Tennessee River Railroad, another work of eminent value to the state, was revived under favorable auspices in 1849, and is now being prosecuted with untiring zeal and energy. This road, extending about 200 miles through a section of Alabama rich in undeveloped mineral wealth, and isolated from market, will have its northern terminus at Gunter's Landing, on the Tennessee river, and its southern terminus at Selma, on the Alabama. It will open, for the first time, to the inhabitants of North Alabama, the means of commercial intercourse with their own seaport. In addition to its local importance, this road possesses other prominent advantages. In the language of the chief engineer, "It is a link in the great chain of railroads now constructing and projected on the most direct and expeditious route which can be selected to connect the Gulf of Mexico with the middle and north-eastern Atlantic states: a route which will present one continuous line of railroads, passing through one of the most healthy and picturesque sections of the Union." A short branch will also place this road in connection with the railway systems of Georgia and Carolina.

The Memphis and Charleston Railroad, on the route surveyed through north Alabama, will connect with the Selma road by a short branch from Huntsville, and intersect the Mobile and Ohio Railroad in east Mississippi, about 300 miles north of Mobile, thus giving the valley of the Tennessee abundant and easy access to the gulf by a journey of twenty hours.

A line, to pass through Perry, Marengo, and Sumter counties, has likewise been projected; which will make a valuable connection between Selma and Mobile, striking the Mobile and Ohio Railroad about 120 miles

from that city, and accommodating a rich and populous section of the state.

East of the Alabama river, the Girard and Mobile Company has been organized, to build a railway from Columbus, Georgia, to Mobile bay. Another very feasible plan for making this desirable connection is now spoken of, by constructing a branch of 30 miles from Columbus to Opelika, and using the West Point Railroad to Montgomery, from thence building a road to some point on Mobile river, a few miles above the city—thus saving a considerable expenditure, and perfecting the railway chain between Charleston, Savannah, and Mobile. Whichever of these two routes be decided upon, a large business will be obtained from through travel, and a valuable part of the state opened to cultivation and improvement.

These five principal lines, if promptly carried forward, would constitute for Alabama as good a railway system, perhaps, as could well be devised. A large proportion of the vacant lands in the state would be traversed by them, and, in consequence, be eagerly purchased and brought into cultivation. Her iron, coal, and marble would remain imprisoned in their native beds no longer, but the smoke of a thousand forges would arise from the wilderness, furnishing profitable employment to a numerous population. Her boundless forests of valuable timber would be transported to the sea and converted into gold. The remotest corners of the state would be brought into convenient neighborhood, and a complete revolution effected in her commercial and social intercourse.

The estimated cost of these railways, with ample equipments for their probable business, is nearly as follows:

Alabama division Mobile and Ohio Railroad from Mobile to south line Kemper county, Mississippi—164 miles.....	\$3,062,000
Alabama and Tennessee River Railroad, from Selma to Gunter's Landing—about 200 miles.....	3,500,000
Alabama and Mississippi Railroad, from Selma to intersection Mobile and Ohio Railroad—100 miles.....	1,500,000
Memphis and Charleston Railroad, from Chattanooga Railroad to intersection with Mobile and Ohio Railroad—150 miles.....	2,000,000
Girard and Mobile Railroad—230 miles.....	8,000,000

Making a total of 864 miles, requiring an expenditure in Alabama, to place them in active operation, of.....\$18,062,000

Only 61 miles of the Alabama division of

the Mobile and Ohio Railroad are within the state, "yet," to employ the words of their report, "its southern terminus being at her chief commercial city and only seaport, Alabama will be the largest recipient of the immense benefits which will flow from its completion. The effect of such a highway as this upon the advancement of its Gulf terminus, Mobile, cannot be over-estimated. Her foreign and domestic trade would rapidly increase—capital would flow in from abroad—her exports would be diversified—her harbor would be whitened with the canvases of every nation, and she would enter at once upon a career of solid and enduring prosperity. In whatever advancement takes place in Mobile, the state at large participates, more or less. To the planter, seeking a market for the sale of his produce, it offers increased competition and abundant means among purchasers, enabling him at all times to make ready sales, and realize the highest prices; while, on the other hand, it furnishes him with the largest, cheapest, and most varied market for every thing he wishes to buy. It throws into his immediate neighborhood a large class of consumers for the minor products of his plantation, for which he has at present no sale. To the inhabitants of the coal and iron districts of Alabama, it becomes a great mart from whence the products of their industry can be distributed through a large extent of country." While this great trunk line will intercept and gather into itself a vast traffic from all parts of the northwest, by means of the many intersecting lines with which it will be united, the Selma and Tennessee road will fulfil similar conditions, in regard to the various railways of the northeast; and thus, by a comparatively moderate outlay, the state of Alabama will be placed in profitable connection with all the grand railways through all parts of the Union.

From her geographical location on the Gulf, Alabama is in an admirable position to take advantage of the railways constructing in other states, and to turn the immense trade and travel which will pour over them into her own seaport, by the early completion of these two north and south lines, and the two cross lines intersecting them. Should she seize the golden opportunity, it needs no prophetic ken to foresee for the state an increase of wealth as great and as rapid as has been realized, in the last ten years, in either Georgia or Massachusetts.

A considerable portion of the estimated cost of these roads has been, or will be, obtained by private subscriptions; but, unfortunately, the large area of public lands, without population, over which they must be carried, while it increases the necessity of their construction, will place the accomplishment beyond limit of individual means, or seriously

retard their progress. Most of the states have recognized the wisdom of the policy of contributing to assist the completion of their railway improvements, and the results have fully vindicated the propriety of their decision. The amount of aid furnished by different states for works of internal improvement is as follows:

In Georgia—the Western and Atlantic Railroad, 140 miles long, built by the state.	\$3,500,000
In Virginia—by state subscription of from two to three fifths of the capital stock of various railroad companies, amounting to.	8,000,000
In Maryland—by loan of state bonds to the Baltimore and Ohio and other railroad companies. ...	5,050,000
In Pennsylvania—Philadelphia and Columbia Railroad, built by the state, in addition to expensive canals.	4,200,000
In New-York—in addition to the construction of the Erie and other canals, a bonus to the New-York and Erie Railroad Company of.	3,000,000
In Massachusetts—by subscription of stock, and loan of state bonds to Boston and Albany Railroad.	5,400,000
In Tennessee—by loan of state bonds to Chattanooga and other railroad companies, about.	1,300,000
In Missouri—by aid granted to the St. Louis and Pacific Railroad, about.	2,000,000

In South Carolina—liberal assistance has been extended by the state to her various railroad companies, the amount of which is not correctly ascertained.

In all these states, save Tennessee and Missouri—where the railways are yet in progress to which they have contributed—the results have been successful, and the same policy is continued as a permanent feature of legislation. Without this aid, but few of the great railways which now span these states would be in operation. The sums contributed by the several states, as above stated, have been employed mostly in the purchase of iron and equipments, the preparation of the road-bed having been provided for from private stock subscriptions. To that extent the roads now projected in our own state can be carried by individual effort; and it is only at this point, when private resources have been exhausted, that the propriety of state legislation in their behalf becomes apparent.

If, however, the arguments thus far adduced be deemed insufficient, there is still another most important relation which railways bear to the state that should arrest the attention of our statesmen and legislators. A few years more, and the Mississippi Valley

will control the political destinies of the country. The northern states possess five great railway avenues leading into that valley, and the south not one. These arteries of commerce, ever pulsating east and west, are daily bearing immense multitudes back and forth between the Mississippi and the Atlantic. The extremes of the Republic are thus brought near to each other and continually intermingle together. Commercial interests awaken mutual sympathies, and they become united by the strongest ties. How could it be otherwise than that a people thus brought into frequent communion, should represent in the national councils the interests of those with whom they fraternize? By pushing on our railways, we not only develop the local resources of our own state to the utmost, but we also reach the heart of the great west, and make a highway from the gulf to the lakes, upon which an immense traffic would spring up, removing old prejudices and creating new sympathies—making the south and west better acquainted—opening a thousand avenues of good feeling and brotherhood, and causing our institutions to be better understood and our rights to be fully respected. A smaller sum, in proportion, than has been contributed by most of her sister states, would, if judiciously distributed among the five lines now contemplated and in progress in Alabama, be sufficient, in addition to private subscriptions, to carry them forward to early completion, and enable our people immediately to realize their benefits. Should this amount be given by the states as a *bonus* for the construction of these railways, there can be no question that it would be a wise and profitable expenditure of public funds, from which she would reap, pecuniarily, a tenfold return. But when it is considered that these improvements may be effected by a loan only of her credit, for the payment of which she would at all times hold ample and substantial security; that railways less favorably located, elsewhere, are yielding fair incomes upon the capital invested; that a great and rapid increase of property invariably follows their construction, and that no possible risk of loss would be incurred by the state; it is unreasonable to suppose that she will fail to meet the expectations of her citizens by refusing to extend a helping hand to the enterprises which they have undertaken.

In conclusion, the committee would most earnestly impress upon their fellow-citizens of Alabama the importance of giving expression to their views upon this momentous question. In August, the election for state officers will take place, and the next Legislature will convene in November. Meanwhile, let the subject be agitated through the length and breadth of the state, so that the sentiments of our people may be made known, and our legislators may go up to the Capitol

fully instructed as to the wishes of their constituents. Let it not be forgotten, that whatever is done for the cause of improvement in Alabama, for at least two years to come, must be done at the next Legislature.

FRANCIS B. CLARK,	} Committee.
P. PHILLIPS,	
J. R. JOHN,	
JAMES L. PRICE,	
J. W. LARLEY,	
E. PICKENS,	
NICH. DAVIS,	
JAMES ABERCROMBIE,	
J. M. STANNARD,	
A. E. MILLS,	

RAILROAD.—THE MOBILE AND OHIO ROAD.—The Mobile and Ohio Road has been located entirely free of such derangements, consulting first of all the general good. 2,500 miles of surveyed line have been run to determine the shortest route, lowest grades and least cost:

	Miles.
Its length in Alabama is.....	62½
“ Mississippi is.....	27½
“ Tennessee is.....	119½
“ Kentucky is.....	39½
Total mail line.....	494½
Length of branch to Tennessee River in Mississippi.....	16
Length of branch to Tennessee River in Tennessee.....	8
Total mail line and branch.....	517½
The main line passes 4 miles west of Purdy, and through McNairy county.....	34 7-10
Corner of Henderson county.....	18-10
“ Madison, (near Jackson),...	31½
“ Gibson, (near Trenton),...	29
“ Obion county.....	22½
Length from Mobile to Tennessee River.....	346
Length estimated, Tennessee River to Columbia.....	92
Length from Columbia to Nashville..	42
Total length, Mobile to Nashville..	480

Thirty-three miles of the Mobile end of the road will be in complete operation by the 15th of February next. Forty-nine acres of ground for depots have been obtained at Mobile, with two wharves and right to run tracks through the commercial streets, that the cars may run to the warehouses, or vessels of consignees. Vessels drawing 10 feet water are the largest that ordinarily come up to the city. All larger vessels anchor 16 to 25 miles below in the bay, where there is 30 square miles of water, 2 to 9 fathoms deep. On the bar between this anchorage ground and the gulf, there is 20½ feet water at mean

low tide. On the bar at the southeast pass of the Mississippi River, there is at mean low tide 15½ feet. Difference in favor of Mobile bay 4½ feet. The Mobile and Ohio road will be extended to this deep water, and thus the cars brought alongside of vessels of 40 per cent. greater capacity than can get to New-Orleans. The export and import freights by these large vessels will be cheaper, and relieved from all charges for lighterage or towage. Vessels from the Atlantic Ocean, the West India islands, or the Caribbean Sea, will generally make Mobile bay a day sooner than New-Orleans; and the exchange trade of Tennessee and Kentucky, with the southern and western portions of the globe, will thus prosper at Mobile bay, via the two arms of the Mobile and Ohio Road. Whilst the same trade with Europe, and the North Atlantic states of our own country, will, for like reasons, thrive at Charleston and Savannah, via the Nashville and Chattanooga Road. The great office of railroads is to liberate men, whenever desirable, from the obstructed natural channels of commerce; and by equalizing prices, supply and demand, break up the spirit of monopoly, domination and speculation of such cities as New-York and New-Orleans.

The Obion River in West Tennessee is the largest stream crossed by the Mobile and Ohio Road. None of them are navigable. At the mouth of the Ohio it will connect with all the steamboats of the Mississippi and Ohio rivers, also with 1,440 miles of railroads, at the bend of Tennessee, with the boats of that river, and thence by a central line of road, via Nashville, to Louisville and Cincinnati, with 1,528 miles of railroads at Louisville, and 3,500 miles of railroads at Cincinnati. Thus forming two great routes from the gulf to the lakes; one ending at Chicago, the other at Cleveland, and connecting thence by railways with Baltimore, Philadelphia, New-York and Boston. These two routes traverse 10½ degrees of latitude, and connecting with steamers to Lake Superior on the north, to the Caribbean Sea on the south, will form a quick transit for passengers and for the interchange of the various products of 38 degrees of latitude; from Chagres and Trinidad to the north shore of Lake Superior, and thus create and stimulate an external and internal commerce far greater than can be promoted by the river channels alone.

The middle ground of this internal commerce will be central; and western Tennessee, where are combined the staple products of the south and north, with a temperate and healthy climate, water power, rich soils, iron, coal, beautiful marbles, limestone, and a variety of valuable timbers; all that can be needful for the prosecution of the mechanic arts and manufactures, except a system of railways, by which the products of all

branches of industry within the state can be distributed north, east, south and west, and spread broadcast for general consumption. The first class roads that will most perfectly form this system, are the two north and south routes above named—the Nashville, Chattanooga, and western, the Charleston and Memphis, and the Eastern Tennessee and Virginia lines. These five roads severally invite the aid of the states to the extent of furnishing the iron and machinery when the people shall have provided for or executed the local work of grading, &c. They are all long lines, (650 to 1,000 miles,) drawing the trade of other states into and through Tennessee, and cannot fail to be eminently successful; while second class short roads, for local purposes, as branches to these long lines, or as tributaries to rivers, may fail to be profitable, and should be let alone until the long lines are completed; they will then, by the increasing prosperity of the people, and the aid of the long lines, come into existence as naturally and fruitfully as branches grow from trees.

New-York, Massachusetts, Pennsylvania, Maryland, Virginia, North Carolina and Georgia, have severally assisted their citizens in building long first class routes, either by a subscription of stock, a bonus, a loan of credit, or by separately building the more difficult portion of the work, and with satisfactory results.

By the road from Mobile to the Tennessee and Ohio rivers, and by the other railroads connecting therewith, the following distances and starting time of trains will be found nearly correct. From Mobile:

	Miles.	HOURS OF TIME. Freight. Passg.	
To Jackson, Miss.....	221	20	9
" Vicksburg ".....	268	23	11
" Bend of Ten. River.....	346	29	15
" Memphis, Ten.....	428	36	18
" Jackson, "	384	32	16
" Trenton, "	409	34	17
" Columbia, "	432	36	18
" Nashville, "	480	40	20
" Huntsville, Ala.....	450	38	19
" Mouth of Ohio R....	494	41	20½
" St. Louis, Mo.....	775	65	33
" Louisville, Ky.....	700	59	30½
" Cincinnati, Ohio.....	800	68	34
" Cleveland, "	1056	90	45
" Chicago, Illinois....	875	74	36½
" Baltimore, Md., via Nashville and Cin- cinnati.....	1445	144	62

The total estimated cost of the Mobile and Ohio Railroad, including the branch to Tennessee River, is ten millions of dollars, of which five millions is for local works, and five millions for iron rails, chairs, spikes, cars and engines. The local work on 127½ miles in Tennessee is one million and sixty thousand

dollars; for iron rails, &c., as above, one million thirty-five thousand dollars.

Average cost per mile of local work. . . \$8,313
 " of rails, &c., at
 the present prices of iron. 8,120

To build the whole road in three years, the present subscription of Mobile furnishes—

For local work. \$600,000
 The new tax law do. 1,100,000
 Present subscription of Miss. do. . . 1,000,000
 To be obtained in Mississippi this
 winter, after the county law is
 altered, dividing the stock among
 the tax payers. 740,000
 Present subscription in Tenn. . . . 150,000
 To be obtained in Tennessee. . . . 910,000
 " Kentucky. 500,000

Total. \$5,000,000

In this sum are included \$50,000 and \$100,000, respectively, for depots at the Tennessee and Ohio rivers.

The lands granted to this road by Congress are about 1,200,000 acres, which are estimated to be worth, after the road is done, three dollars per acre—mortgaged with the road to the state of Tennessee and foreign capitalists for a loan of five millions of dollars, for the term of twenty-five or thirty years; they can be sold within fifteen years after the road shall be completed, and the money invested in a sinking fund for the redemption of the bonds at maturity. It is calculated and believed that at the end of the twenty-five or thirty years, this fund will be sufficient to pay at least four fifths of the whole loan; the interest being paid semi-annually from the earnings of the road. It is therefore respectfully requested that the present legislature of the state of Tennessee will assist the Mobile and Ohio Railroad Company to obtain this loan of five millions of dollars on the best possible terms, by furnishing therefor state bonds to the amount of \$1,035,000.

The organization of the company embraces two financial and local agents, one a citizen of Mississippi for that state, and one for Tennessee and Kentucky, to be a citizen of Tennessee, whose duty it will be respectively to obtain the subscriptions for the stock before contracts are made, and afterwards collect the instalments, and pay the contractors from time to time for work done in their respective districts.

The rate of charges for passengers and freights on the Mobile road will incline to the low fare system. For passengers 2 to 3 cents per mile; for heavy, low-priced products of fields, forests and mines, and groceries, 1½ to 3 cents per ton per mile; for merchandise generally, 3 to 5 cents per ton

per mile; for cotton from Tennessee to Mobile, \$1 50 to \$2 50 per bale.

With fixed rates of transportation, and the prices current received each day by the passenger trains from Charleston, Mobile and New-Orleans, the merchants of the interior can buy the entire crops of the country without risk; sending on one purchase after another for quick sale—import their own goods—and, in buying and selling constantly, in both directions, turn a profit on their capital twelve times a year. Tidal railways are the virtual extension of the city wharves throughout the land, and enable the merchants (of Nashville, for instance) to import and export for the country around with great facility.

By the time the Mobile road can be completed to the Tennessee and Ohio rivers, low pressure steam packets, built for passengers alone, will be prepared to run in connection with the road from New-Orleans to Mobile, and from St. Louis and Louisville to the Ohio terminus. The latter will be long, light and swift, drawing so little water as to run in the lowest stages of the rivers. By such packets, and the railroad, passengers can be conveyed in safety from St. Louis to Mobile in 36 hours for \$12; from Louisville to Mobile in 47 hours, for \$13; and from Mobile to or from New-Orleans, in 12 hours, for \$3.

When the route from the bend of the Tennessee to Louisville and Cincinnati shall be completed, connecting with the Chattanooga road at Nashville, the southern travel of Louisville and Cincinnati, and of the 5,000 miles of northern and eastern railroads which centre at those cities, will come via Nashville. But before this shall be done, the Mobile road cannot fail, by its junctions with the Tennessee, Ohio and Mississippi rivers, with the central Illinois road, and, thereby, with the traffic of the railroads and lakes of the north, to have an immense business. The ease and safety it will afford for people to escape in winter, in a few hours, from the cold blasts of the north to the temperate breezes of the south, or in summer, from the heat and sickness of the south to the bracing airs of the north, will enlarge its travel, both *through* and *way*, beyond any present calculation. Based, however, upon low rates, upon one third of the passengers that now pass annually up and down the Mississippi River to and from the northern states, and upon carrying way passengers equal to one third of the white population of the country adjoining the route, which is the first year's average experience of other railroads of our country, we shall have the following direct income, viz.:

From 125,000 through passengers,
 at \$8. \$1,000,000
 From 110,000 way passengers, at \$2 . . . 220,000
 From through freights of merchan-

dise, live stock, bread stuffs, &c..	842,000
From way freights of do.....	738,000
From United States mails.....	90,000
Total income.....	\$2,890,000
From which deduct all expenses for depreciation of tracks, repairs, and working the roads.....	1,445,000
Total net earnings.....	\$1,445,000
From which pay interest on five millions loan, 7 per cent., includ- ing exchange.....	350,000
Pay for additional cars, engines, side tracks, and buildings for in- creasing business.....	200,000
Pay 15 per cent. dividend on stock for local work of \$5,000,000...	750,000
Total for interest, construction and dividend.....	\$1,300,000
Leaving a surplus for contingencies or sinking fund of.....	145,000

In relation to the revenue of railways, it must be borne in mind that long lines, leading in the most direct and shortest course to tide water, from and through productive and well settled countries, with low gradients, and without breaks of track or gauge, or the delay of transshipments, are the most profitable to the stockholders and the country at large; but short and local roads are every where, especially in thinly settled countries, of very doubtful success, until favorably connected with tidal lines. Any general system, therefore, by a state to aid the construction of short and local lines, as well as the long and profitable ones, will divert much of the labor and means of the people from the latter to the former; introduce and encourage many speculative enterprises; protract the completion of the tidal lines; and greatly increase the state debt for private more than for public good.—*Col. Childe, Engineer.*

RAILROADS IN LOUISIANA.—SURVEYS OF JACKSON (MISS.) ROAD.—The Committee on Surveys have the honor to report to the Board of Directors of the New-Orleans, Jackson, and Northern Railroad Company, that, agreeably with instructions of the 15th May, immediate measures were taken to organize a corps of topographical engineers, to survey carefully the several routes which had been suggested as most suitable for a railroad from New-Orleans to Jackson, Miss.

The extensive surveys and very complete information obtained by the old New-Orleans and Nashville Railroad Company, rendered the duties of the committee comparatively easy. The location of that railroad along the valley of the Tangepahoa was taken as a base line, from which our operations were made.

A party, fully equipped for field operations, under the direction of Mr. Henry Waller, civil engineer, a gentleman of much experience and professional skill, left New-Orleans for the state line on the 12th of July, and commenced their surveys at the junction of McGee's creek and the Bogue Chitto, about two and a half miles north of the state line. From this point, a line in a southwesterly direction was traced, connecting with the old Nashville line, which crossed Pass Manchac, and an extension, connecting also with the survey of Mr. Phelps around Lake Maurepas. These surveys were made to enable the Board of Directors to assure the stockholders and the public, both of Louisiana and Mississippi, that the idea of building a railroad across the valley and intervening ridges of the Tangepahoa, Chappapela, Chefuncte and Bogue Chitto, to Pearl river, approaching Jackson by the valley of said river, was inexpedient when viewed either with reference to cost or mechanical efficiency.

The committee beg leave to state, that it is the unqualified opinion of their engineers, that the best line of railroad from New-Orleans to Jackson, must be located west of the Tangepahoa, and approach the last named city after entering the state of Mississippi, between the Tangepahoa and Tickfaw, to the common summit of those streams and the Bogue Chitto; and thence descending the western slope of the valley of Pearl river, to the city of Jackson. A copy of the lithographic map of Maj. Ranney, which is herewith presented, exhibits the line described.

Having carefully surveyed every probable route east of the Tangepahoa, our engineers were ordered westward to examine the ridge between the Tangepahoa and the Tickfaw; also the valley of the Tickfaw. The result of these investigations leads us, without doubt, to the conclusion that, after reaching the high lands on the north side of the lakes, the true route of the railroad will be found, as formerly located, along the valley of the Tangepahoa. Whether the railroad shall pass from New-Orleans to high land by the old Nashville location, between Lakes Pontchartrain and Maurepas, or whether a line shall be adopted around the head of Lake Maurepas, is still regarded by the committee as a doubtful question, to be decided after very mature reflection. The line between the lakes is seven miles and a half shorter than the line around Lake Maurepas; will require one draw-bridge, but passes over more swamp land, and does not afford the same amount of local accommodation. The line around Lake Maurepas is more exposed to the influence of crevasses; will require three draw-bridges; is on better ground; but increases the distance, as before stated, seven miles and a half. The committee, however, feel authorized to assure the Board of Directors, that no serious difficulties exist on

either line. The bridges may be constructed on piles; and those portions of the road which pass over low swamps may, in the first instance, be also constructed on piles and trestles, and afterwards filled up with sand and clay, to be transported on the rails, at a moderate cost, from the north shore of the lakes.

The Committee on Surveys have also procured from the General Land Office a copy of the United States Land Surveys, embraced between, and including, ranges five and eleven, from the state line to the Mississippi River. The government plans have been reduced to a scale of one inch to a mile by an accurate instrument, and embodied in a map of convenient size, on which is distinctly shown every section and fractional section of land, whether vacant or occupied. The map also embraces the surveys which have been made for railroads, including profiles of several of the principal routes. Profiles and plans, on a working scale, of the surveys made by Mr. Waller, have been deposited by him with the chairman of the committee; also, books containing all his field notes. The committee take great pleasure in acknowledging the skill and fidelity with which Mr. Waller, and the gentlemen under his command, have discharged their duties. During the summer months, much sickness prevailed, both among officers and men; but the surveys were never suspended; and during the autumn months our operations were retarded by heavy rains, and the miserable condition of the swamps between the lakes and the banks of the Mississippi River.

The committee beg leave to acknowledge their obligations to Maj. Ranney, for a large amount of valuable information connected with the duties assigned them. He has placed at the disposal of the committee his finished maps of the location of the old Nashville railroad to the state line, and also his maps and notes of experimental surveys reaching to the Tennessee River. These surveys were made under the personal direction of Major Ranney, in 1835, aided by a large and most efficient corps of assistants; and the committee find great satisfaction in stating to the Board, after a careful examination of these documents by their chairman, that a continuous line of railroad from New-Orleans to the Tennessee River may be constructed with less labor, and with superior mechanical efficiency, than any other railroad of the same length either in America or elsewhere. The line will be very direct; and where deflections are required, the curves may be made so gentle as to be regarded, for practical purposes, *straight lines*; the dividing ridge, or, more properly, the table land, between the Gulf of Mexico and the Tennessee River, may be crossed by grades not exceeding, in any instance, sixteen feet to the mile; while three fourths of the

line will be level, or with grades within ten feet to the mile.

The superiority of this line will give to the trade of the Gulf of Mexico a vast advantage, in comparison with that which passes to the Atlantic over the high grades and strong curves necessarily encountered in winding a way from the western to the eastern side of the Alleghanies. An engine will transport more than double the freight from the Tennessee to New-Orleans or Mobile, and at a higher velocity, both for freight and passengers, than can be effected on any line of railroad leading from the great valley to the Atlantic. The length of our road should be a subject of congratulation; for while, at its farthest point, we may compete successfully with any other commercial community, we build up and secure an immense intermediate trade peculiarly our own, and which none can ever divert from us.

The Committee on Surveys present to the Board of Directors this hasty report, embodying only general facts, in order that the Board may be made acquainted with the satisfactory results which have attended our investigations. Our surveyors only returned to the city on the 23d of December, after five months' absence on field duty. It will require a short time to bring up their office work, when the committee will present a report in detail. The Committee on Surveys cannot close this report, without acknowledging the satisfaction they experienced in the belief that there is no difficulty of a serious character to be encountered in the construction of a great trunk railroad from New-Orleans to the Tennessee River, where we will engraft on our stem the vast system of branches now being extended throughout the land.—*Campbell's Report.*

RAILROADS IN LOUISIANA.—BATON ROUGE PROJECT.—Whereas, at the Southwestern Railroad Convention, held in the city of New-Orleans in the month of April, 1851, a report was made by the committee on plans and projects, in which it is stated that "the distance from New-Orleans to Jackson via Pontchartrain Railroad, Lake Pontchartrain, and Madisonville, is 173 miles, of which distance about 30 miles will be steam ferry. By the located line of the old Nashville Railroad, the distance is 192 miles. By a route recently surveyed by Mr. Phelps, passing above Lake Maurepas, the distance will be about 200 miles; and by a proposed line up the river to the vicinity of Baton Rouge, the distance from New-Orleans to Jackson will be about 213 miles. The latter route avoids difficult swamps, extensive draw-bridges across navigable streams, and passes through a fertile and well improved country. The majority of the committee are of opinion that the road via Baton Rouge may be constructed in the most

substantial manner from New-Orleans to Jackson for two millions of dollars, and that the shorter lines would not cost materially less. The cost of the road from the state line of Louisiana to the town of Jackson will be the same on either route, and may be estimated separately at one million of dollars!"

And whereas the said proposed route presents advantages, certainly not to be overlooked, in entering upon a vast system of internal improvements, in which it is confidently expected all the energies of the state and of the people of the state will be promptly and efficiently enlisted:

These advantages being—

1st. That throughout its whole course such road will pass through a densely populated and fertile country, the inhabitants whereof are not only able but willing to contribute liberally for the formation of the road.

2d. That by touching the Mississippi at the city of Baton Rouge, easy and speedy communication can at all seasons of the year, and under all circumstances, be had with the city of New-Orleans.

3d. That in the event of an overflow of the river Mississippi at any point between the cities of New-Orleans and Baton Rouge, a railroad, whether passing the latter place, or diverging from the river Mississippi, so as to cross the river Amite near its entrance into lake Maurepas, or to cross the pass between lakes Maurepas and Pontchartrain, must be liable to destruction, or at least to great damage; and therefore it is highly desirable that the road now proposed to be constructed should touch the river Mississippi at a point not liable to inundation, in order that there may, under no circumstances, be any delay or interruption in the transportation of passengers and freights to New-Orleans.

4th. That by extending the road from New-Orleans to Baton Rouge, along or near the bank of the river Mississippi to Baton Rouge, it will have the advantage of passing over the highest lands, avoiding swamps, and not liable to any obstruction or damage from overflows, not common to the other routes proposed.

5th. That the route via Baton Rouge, passing from that place towards the city of Jackson, Mississippi, over a comparatively high country, free from swamps, not traversed by large streams, and at the same time not requiring excavations or embankments to any considerable extent, can be constructed at less expense than one passing through a low country, where many and extensive swamps must be encountered, and several navigable streams must be bridged.

6th. That the corporation now proposed to be created, can avail itself of the work done by the Baton Rouge and Clinton Railroad Company, which consists in opening the proposed route about thirty miles or upwards, cutting off the timber a width of one hundred

and twenty feet, preparing the road for laying the superstructure for about fourteen miles, digging out all stumps and roots, cutting ditches on each side of the road, and throwing the earth into the centre, so that at the present time the superstructure can be laid for that distance without any considerable expense, and the course of said road being on a direct line towards Jackson, Mississippi.

7th. That passing through the populous, fertile, and productive parishes of East Baton Rouge, and East Feliciana, in Louisiana, and the county of Amite, Mississippi, each mile of the road would produce revenue as soon as it is constructed.

8th. That the inhabitants of the parishes of East Baton Rouge and East Feliciana will promptly and cheerfully contribute a sum sufficient to construct such road through their borders, the evidence of which is the fact that, after the adjournment of the Convention, held in April last, near one hundred thousand dollars was subscribed by the inhabitants of Baton Rouge and its vicinity in three days, and no doubt thrice that amount can readily be obtained, should the road take the course indicated.

9th. That there being no obstruction to navigation between the cities of New-Orleans and Baton Rouge at any season of the year, the passengers and the produce of the counties through which a road is proposed to pass, would at all times reach the great commercial metropolis of the southwest without detention, and without any additional expense.

10th. That the difference in distance between the route passing to the west of Lake Maurepas, and that passing by the city of Baton Rouge, will not exceed twenty miles, and the expense of construction will not exceed that of the shorter lines.

One other view, we conceive, may with propriety be presented to your consideration. By taking the route we propose, the road will reach a point on the river Mississippi opposite the Bayou La Fourche, and from thence may be constructed the great road leading through the parishes situated on that Bayou, and thence through the counties of Attakapas and Opelousas to the Sabine river, at such point as may meet the desires of Texas. By so doing we will avoid the interruptions that may occur by breaches in the levee on the west bank of the river below the Lafourche, and save the expense of constructing many miles of road. If to this it is objected, that all passengers and freights must be transported across the river at Donaldsonville, the reply is, that if the road is continued on the west bank of the river to Algiers, still you must cross it to reach New-Orleans, and the expense and delay of crossing at the one point cannot be greater than at the other. We all concede that New-Orleans is, and of necessity must be, the great commercial mart of the southwest

and west. We do not, therefore, seek to supplant her. We seek to enter into no invidious rivalry with her, but we do seek to conduce as much as possible to her advancement, considering that by doing so, we advocate our own best interests.

Therefore be it resolved,

1st. That the Committee on Routes be instructed to take the said route into consideration, and report thereon.

2d. That in the opinion of this convention, it is of vital importance to construct a road by which the river Mississippi can be reached at a point, between which and the city of New-Orleans there are no obstructions to navigation, and which would insure a safe, speedy, and cheap transportation of passengers and products to the city of New-Orleans at all seasons of the year, and without danger of delay from inundations of the alluvial country, by the breaking of levees, or the opening of the Bayou Manchac.

3d. That it will be the true policy of the state of Louisiana and of the city of New-Orleans to construct the proposed railroad through a country practicable, populous, fertile, and wealthy, rather than through a difficult, sparsely populated, and unproductive part of the country, even although the distance and expense may be somewhat increased.—*T. G. Morgan.*

RAILROADS IN LOUISIANA—SURVEY FROM NEW-ORLEANS TO THIBODEAUXVILLE.—I have the honor to submit herewith a report of so much of the survey of the route of the railroad to Opelousas as the limited time I have had would permit.

After having received the appointment as chief of the survey, I prepared to go to work at once. But, as not only the importance of the work, but the unknown nature of the country between Algiers and Thibodeauxville, required a reconnoissance before determining where the surveys should pass, I proceeded from Algiers to Thibodeauxville, in company with W. T. Thompson, Esq., assistant engineer.

Our route was up the river to the Barrataria canal; down the canal through Lake Washa; up the Bayou des Allemands to Lake des Allemands; through the lake, down Bayou Boeuf, six miles, to its juncture with Bayou Cabanosa or Chegbee; up Bayou Chegbee to Laforests and Scuddy's plantation, and from thence to Thibodeauxville. This route crossed the direct line on the Bayou des Allemands, passing south of it on the eastern portion, and north of it on the western portion, leaving the other sides for a future reconnoissance. The result of our observations and inquiries was, that a line could be run in nearly a straight course between Algiers and Thibodeauxville. A party was organized by Mr. Thompson, and the survey commenced. He has been untiring in his efforts to get through; but such have been

the numerous and various difficulties with which he has had to contend, and which will be detailed in his report, that he has not been able to finish the survey. Another party, under Mr. T. Gillespie, was afterwards formed, in order to expedite the work, and the survey commenced from Bayou des Allemands towards Thibodeauxville. During this time, I was engaged in a reconnoissance of Bayou Boeuf and the adjacent country, as far down as Lake Boeuf. I then proceeded with Mr. Gillespie to meet Mr. Thompson on the prairie, by way of Lake Washa, Lake Catawasha, and Lanoux's canal. My object was to reconnoitre the prairie in its broadest part, which was effectually done, although with much personal inconvenience in getting through the prairie.

The line determined upon for the survey was decided upon after the first reconnoissance, after mature deliberation, and for reasons which I shall briefly explain in the subsequent part of this report. Its direction is as follows: Commencing at Algiers, on the river bank, at Verret's canal, where the levee is very small, and down the canal until opposite the commencement of the bend of the river; thence round the bend, at the distance of 4,000 feet, to the railroad on Millaudon's plantation, on the ridge of the Bayou des Familles; thence, in a direction south, 78½ degrees west, to the Bayou des Allemands, thence due west, crossing Bayou Boeuf, between Bayous Tortue and Baton Pilon, to a point one mile from Bayou Lafourche, and opposite the point of starting of the second division; and thence to the Bayou Lafourche. The curves in this line are, beside that from Gretna to Millaudon's, the one joining this curve to the straight line to Bayou des Allemands, another at the Bayou, and another at Bayou Lafourche, and are so easy as hardly to be noticed. It will be seen, by referring to La Tourette's map, that a right line from Algiers to Thibodeauxville would be impossible, without crossing the river. By commencing at Verret's canal, and passing as above described, it runs on the best route, without interfering seriously with any of the plantations.

The straight line from Millaudon's to Bayou des Allemands was chosen, as being the most favorable ground, and as running to the best point for crossing the Bayou—there being three islands there; from thence to Thibodeauxville is an experimental line, and subsequent surveys may possibly cause the route to pass a mile or two further north. The distances have not all yet been measured; the aggregate will not vary far from 51 miles. The nature of the country is, from Verret's canal to Millaudon's, cypress swamp, good foundation, with marks of crevasse water from nothing to three feet. From Millaudon's to Bayou des Allemands, except the first two miles, may be called the Great Prairie. It is twenty miles long, and is a low, marshy prairie.

rie, interspersed with narrow ridges, of a few inches high, and its northern border pierced by ridges not subject to overflow. A detailed survey of this country is required to connect these ridges, so as to determine whether a deflexion of the line would be advisable. The growth upon the prairie is reed grass, from ten to twelve feet high, and saw grass nearly as high—and both so luxuriant as to be very difficult to pass through. I was eight hours going six miles through it, with two stout men to beat it down before me; and the surveying parties cannot go over three or four miles per day. The ridges, on the border, are well wooded; and the cypress bottoms also extend some distance beyond the line, at several points. The soil is generally moist, but firm enough to bear up men at all times, and cattle in dry weather. The soundings gave me hard clay bottom at ten feet depth; this is a general feature of the prairie, in its whole extent—but there are some places which appear to be the beds of bayous choked up, which are very boggy, and impossible to cross on foot, but can be got over by crawling, or by light bridges. There are portions of the prairie called “trembling or floating prairies,” but not to any great extent on the line, or near to where it should pass. They are principally in the southwest portion of the prairie, between Lakes Washa, Catawaaba, and Little Lake des Allemands. They are, in my opinion, small ponds, which, being protected from the winds by the rank grass of the prairie, have been overgrown with weeds, until sufficiently firm to bear a man's weight. The thickness of the crust is about eighteen inches, and the water underneath about ten feet deep, with hard bottom, corresponding with the firm foundation of the prairie. The prairie is kept wet by the water from the lakes being driven upon it by high winds. Its luxuriant vegetation indicates its richness; and, if properly leveed and drained, it would be most valuable farming land. In its present condition, it is only a hunting ground for the planters and others.

The route of the line is intersected by numerous bayous, some of which run into the lakes, and others lose themselves in the prairie. Up to this time, the “prairie” has been a *terra incognita* to most people, and represented as impassable in every direction. Although I have been around, and across, and even under it, I am not prepared to give a full map of its surface, showing all the canals, bayous, ponds, floating prairies, and forests; and much more elaborate surveys should be made, to make such a map as is required. The best time for such a survey is in the winter or spring, when the reeds are burned off, and the mosquitoes are less abundant—and with men of iron nerves and constitution. The prairie, on the west side of Bayou des Allemands, is only four miles wide, and is of the same cha-

racter as on the east side. Bayou des Allemands, at the points of crossing, is above three hundred feet wide, in the eastern shoot, with twenty feet deepest sounding; and two hundred and fifty feet in the western shoot, with fifteen feet deepest sounding. The island is one hundred and ninety-six feet wide—firm land, without timber. The current is affected by the winds, which cause a rise or fall of about two feet. From Bayou des Allemands to Bayou Bœuf, is cypress swamp, on each bayou, with the prairie between. From Bayou Bœuf west, is four miles of cypress, gum, ash, and maple swamp, with good bottom; thence to Bayou Lafourche, high forest land, with occasional bayous. Bayou Bœuf is about one hundred and fifty feet wide, with a depth of seven to ten feet. Its current is gentle, but constantly towards Lake des Allemands. The waters of Lake Bœuf pass into this bayou by a canal, which imperfectly drains it. Bayou Lafourche, at Thibodeauxville, is 230 feet wide at surface of levee, and twenty-six feet deep.

Throughout the route, I found marks of crevasse water, in some places over four feet, and over five in some bayous in the cypress swamps. It is the mark of the Fortier crevasse, and extends to the high lands of the Lafourche. There, the Cantrelle crevasse came up to the clearings of the plantations. It becomes, therefore, an important question as to the nature of the railway; and, after careful inquiries and examinations, I have come to the conclusion that an embankment cannot be considered, because, not only that it would block up the waters of a crevasse on to the river plantations, but that it could not stand. I have particularly examined the banks of the Barrataria and of Lanoux's canals, with a view to this subject. They are now very near the level of the prairie, although built about six feet high. The earth is melted away, or sinks down by its weight; and it is further destroyed by water rats, otters, and alligators, which abound; so that unless those causes can be destroyed, by complete drainage, no levee can be built which would endure long, as required for a railroad. The foundation must, therefore, be a frame-work of iron or wood, six feet above the general level of the route.

Iron is too expensive for the present, and must therefore be replaced by cypress, which, if properly chosen from the low lands, will last long.

The expense of constructing this portion of the road will be much heavier than farther west; and must be estimated, at least, \$15,000 a mile. This estimate would have to be made at the same rate to go up the river, as the nature of the country between the points of the river is the same as a portion of the straight line—namely, cypress swamp and prairie; and the distance between the points, in the

aggregate, would be nearly or quite equal to the straight line route. I assume, as a matter of course, that a straight line is the line to be chosen, if practicable. And I have not varied from it, except for good reasons.

Time has not been sufficient to make such a detailed survey as the magnitude of the work requires; but when it is considered that since the 2d of December, there has been at least 25 miles measured out of 50, on which the line runs; and considering the difficulties of supplying the surveying parties with provisions, I hope that the committee will see that the work has been pushed. Out of 27 days, I have been 20 days actively engaged in the field, and at all times engaged in the business of the survey. Mr. Thompson has not lost a day since the 2d of December, except by circumstances unavoidable; and he is still in the field. I beg leave to recommend him and Mr. Gillespie to your favorable notice, for perseverance and energy.

I have been brief in this report, as I only arrived in the city this evening; and, of course, cannot be expected to make a full report, or prepare a map; but, if desired, I will make them at a later period.

To fully satisfy the mind of the public, several routes ought to be explored. For instance, one around the head of Lake des Allemands, which would be seven or eight miles longer than the straight line. Another route up the river, to a ridge about twenty miles above the city; and along this ridge to the point on the Bayou des Allemands where the straight line crosses. This will avoid much of the prairie, but lengthens the road about four miles. And another along the ridge of the Bayou des Familles, the shores of Lake Washa, and along the Barrataria canal, to the eastern ridge of Lafourche, which would also be longer, but would facilitate more country.

I deem it proper to remark, that as the convention decided that a railroad should be built from Algiers to Opelousas, and my instructions were to run a portion of this line, I have not referred to a plan of a road to end on the river above New-Orleans, or to cross over to meet the Jackson Railroad, but would merely suggest that the expense and delay of such a road would be greater than by a direct route to Algiers. The Mississippi is too uncertain in its action on its banks, and its rise and fall too great, to permit us to think of any construction to pass a railroad across it, or re-ship freight short of New Orleans. Travellers from or to the west would also prefer to make but one crossing, or change of conveyance. The road must be looked at on a grand scale as the great route to the "great west;" and, if possible, must be kept in that direction, leaving the neighborhoods to join it by plank-roads or branch railroads.

For this occasion, I beg leave merely to state that, in my opinion, (founded upon per-

sonal examination, and from information derived from every source—planters, hunters, fishermen, travellers, and which all verify my own observation,) a railroad, elevated above crevasse water, can be built from Algiers to Thibodeauxville, in nearly a direct line, for about \$15,000 a mile; or, in round numbers, for the whole distance of fifty-one miles, for \$300,000; and I congratulate you, sir, on the favorable result of this important survey.—*Blanchard's Survey.*

RAILROADS IN LOUISIANA.—OPELOUSAS ROAD SURVEY FROM THIBODEAUX.—Agreeably to your request and instructions, I have, with the assistance of Dr. W. S. Smith, surveyed that portion of the route of the contemplated New-Orleans and Opelousas Railroad, lying between Thibodeaux and Berwick's Bay, and submit to you this, my report:

We first fixed on a point supposed to be the most eligible for crossing Bayou Lafourche, about a quarter of a mile above the corporate limits of the town of Thibodeaux, which point is 15 chains and 70 links below the upper line of the plantation of Judge Guion.

From thence, for nearly five miles, we directed our course so as to follow a ridge of high land, known as the Pointe aux Chênes; at this distance the ridge turns so much westward as to be no longer available. We then turned the course a few degrees to the right hand, running through a cypress swamp two miles and a half across, striking the nearest point of high land on the Chucaboula ridge. This last mentioned swamp has a firm, hard clay bottom, with crevasse water-marks varying from three to four feet, and in a few sloughs, five feet water-mark. In the summer season this swamp becomes entirely dry, but now has on it water averaging one foot in depth. It is my opinion this swamp might be drained and kept most generally dry, by making a sufficiently large canal across the Chucaboula Ridge into Bayou Tiger, at a point where the distance would be but about one half a mile in length.

Thence our line curves still more to the right hand, running along the Chucaboula Ridge about four miles, and enters a cypress swamp similar to the one last described. This swamp it crosses in a distance of three eighths of a mile, striking a low and narrow ridge of land on the Bayou Tiger. Following this ridge, twice crossing the Bayou Tiger, at 13 miles from Lafourche, we arrived at a point on the right bank of Bayou Black, opposite the town of Tigerville.

It will be observed, also, by referring to the annexed sketch, that the line thus far crosses the Bayou Chucaboula four times; but this bayou, as well as the Bayou l'Oura, hereafter referred to, is very small and hardly observ-

able, being what is generally termed a dry bayou.

Thence from opposite Tigerville, crossing a little to the left, the line runs along the high lands of Bayou Black two miles and a half, thence curving slightly to the right across the high lands of Bayou l'Ours one mile and a half, and enters a cypress and tupelo gum swamp, lying between the high lands of Bayou l'Ours and Bayou Bœuf.

This swamp has crevasse water-marks from three to four feet, and is less firm on the surface than those previously crossed on our line. At a depth of from six to twelve inches below the surface the ground is tolerably firm, being clayey, or what is here generally termed "terre gras." The line across this swamp is a little more than two miles in length, and that near the middle crosses a small draining bayou, the bottom of which is boggy.

Leaving this last mentioned swamp, and passing over cultivated land, at 19½ miles from Lafourche, we arrived on the east bank of Bayou Bœuf. This bayou is 590 feet in width, banks 8 feet above tide-water, and has a gentle current each way according to the tide; difference between ordinary high and low tides about 18 inches.

The soundings across Bayou Bœuf, on our line from the east bank, and taken at a moderately low tide, and at nearly equal horizontal distances, were as follows: 4 feet, 7½ feet, 12½ feet, 15 feet, 15 feet, 15 feet, 15 feet, 15 feet, 14 feet, 10 feet; the two extremes being about 50 feet from the banks.

Thence the line continues in the same direction over cultivated land a little more than half a mile, and enters a palmetto, ash, and cypress swamp, having on it but little surface water, with a very firm clayey bottom, and three feet crevasse water-mark. Crossing this swamp in a distance of about a half mile, the line enters upon the high lands of Bayou Bœuf again. Thence the line passes over said high land, mostly in cultivation, crossing Bayou Ramos at a distance from Lafourche of 22½ miles nearly, and reaches Berwick's Bay at a distance of 26½ miles from Thibodeaux, of which, say 5½ miles, is through level overflowed swamp land, and the balance on high, level, and arable alluvial lands.

On this route there will be required several culverts across small bayous and drains, not involving heavy expenditure, and in addition five bridges, viz.: two across Bayou Tiger, which is 60 feet wide and 8 feet deep; one across the draining bayou in the swamp between Bayou l'Ours and Bayou Bœuf, which is 150 feet wide, and from 1 to 3 feet deep; one across Bayou Bœuf, the cross section of which is given above; and one across Bayou Ramos, which is 360 feet wide and 6 feet deep.

The country traversed on this route is all very nearly level, no portion being more than 15, nor less than 2 feet above tide-water.

Consequently no cuttings will be required, nor embankments, except in the swamp portions, sufficient to elevate the road above the highest crevasse water, and in other portions to secure a good foundation.

About one half of the whole length of the route is on arable land, never overflowed, and the other half on land subject to immersion from 1 to 4 feet, in times of extreme high water of the Mississippi river, caused by breaks of the levees in the parishes of Point Coupee and West Baton Rouge. It might be supposed that an embankment, such as it is proposed to make, would operate as a dam, causing injury to the lands above it, as well as to the work itself. Such would not be the case, because the great area over which this crevasse water extends, and the level surface of the country in all directions, mostly a dense forest, gives to the overflow more the nature of a lake than that of freshest inundation. The culverts and bridges proposed on the route will be amply sufficient to allow the water to maintain nearly the same level on each side of the embankments.

I am in possession of data sufficient to estimate closely on every portion of the road between Thibodeaux and Berwick's Bay, with the exception only of the bridges. The time allowed for making the survey was not sufficient to permit me to bore or sound the bottom of the bayous requiring bridges, and consequently only an opinion can be hazarded as to their description or cost.

Many engineers and others are of opinion, that the best manner of building railroads across overflowed swamps similar to those on this line, is on a construction of trestle work. I conceive that a more substantial and cheaper road-bed can be obtained by throwing up solid embankments of earth, and I have estimated accordingly, giving them such a height in the swamps as to be more than one foot above the highest crevasse water-marks, and on the other land so high as to secure at all times a solid foundation.

ESTIMATES.

Cutting trees and clearing roadway,	\$ 8,600
All embankments and grading, . . .	36,890
Lumber for mud sills and cross ties,	32,020
Iron rails, 63 lbs. per lineal yard,	
spikes and chairs,	112,750
Labor on superstructure,	32,100
Add 10 per cent. for contingent expenses and engineer's department,	22,236
Total (equal to \$9,144 per mile), . .	\$244,596

In addition to the above, there must be allowed for bridges, culverts, and depots, or warehouses, a sum which will add to the cost of the road probably not exceeding \$1,200 per mile.

Your instructions required me to examine another route, commencing at the junction of Bayou Shaver and Bayou Boeuf, and following eastward on the south side of Bayou Boeuf, crossing the Bayou Chene; thence on south side of Bayou Black, and crossing Bayou Crocodile; thence on or near the south boundaries of township 16, ranges 14 and 15, to Bayou Black again; thence on the high lands of Bayou Black to a point in T. 17, R. 16, and then crossing over to Bayou Black again, near the eastern junction of it and Bayou Chuchahoula, and thence up on the high lands of Bayou Black to Thibodeaux.

This last described route is certainly worthy of consideration and examination, by reason of its passage through a district of country which might afford much local business to the road; and before any location of the road shall have been positively determined on, it ought to be surveyed in detail. Time was not allowed me to make this survey, as ordered in your instructions, and make out a report thereon in season to be submitted to you previous to the meeting of the convention.

The distance between Thibodeaux and Berwick's Bay, by the route last described, would be between 38 and 40 miles. From previous knowledge of some portion of it, and a recent examination, without instruments, of other portions, I am of opinion that the route (with the exception of one particular locality of the extent of about two miles) is entirely practicable, but would cost as much or more per mile as the more direct route, first described, and which is some twelve miles less in distance.

The question then would present itself, whether the additional local business of the longer route would justify the outlay of its additional first cost of construction, and also the additional charge on all the business of the road from and beyond Berwick's Bay, in all future time. On the longer route many more curves would be required than on the other, consequently less velocity in transit could be obtained with the same degree of safety. Those only who are practically acquainted with the working of railroads, will give due weight to this comparison.

Another thing to be considered, and one, I think, of much importance, is, that the longer route, terminating at Bayou Shaver, would for ever preclude the proposition of crossing Berwick's Bay on a permanent bridge. Most persons, I am aware, are of opinion it is not practicable to do so. In order to satisfy myself, and others who may be inclined to investigate the matter, though not required by your instructions, I have taken a cross section of the bay, above the mouth of Bayou Boeuf, the result of which is shown on the annexed sketch. This proves clearly to my mind that if the bottom shall be found sufficiently firm, a permanent bridge can, and certainly will, be con-

structed across the bay, sooner or later, if the road shall ever have any considerable extent or business. At first, it may probably be advisable to cross Berwick's Bay by means of a floating bridge; and if it be so decided, then the road should be so located near the bay as is represented on the annexed sketch by dotted lines, in order to avoid a mud-flat on the eastern shore of the bay.

Your instructions also required me to survey the route for a branch from the main road to the town of Houma, in the parish of Terrebonne. I have projected on the sketch, in dotted lines, two different routes, either of which may be selected. The shortest follows over cultivated lands on Bayou Terrebonne, being in length about fifteen miles, and the other over cultivated lands, mostly on Bayou Black, having a length of about seventeen miles. The longest route would afford the greatest amount of local accommodation, and that being the main object of a branch, it would, most probably, be preferable.

The annexed sketch represents the leading features and results of the survey I have made of the route, and the adjacent country, but does not by any means represent the particular details obtained. You had expressed a desire to have something tangible to present to the Convention respecting the portion of the route confided to my examination, and I have complied with your request, although the limited time allowed prevents me from doing justice to either the work or myself. This report, and accompanying sketch, may be relied on as far as they go; but had more time been allowed, both might and ought to have been given much more in detail. My field notes of the survey describe every thing observed on the route necessary to a correct understanding in the premises, and shall be carefully preserved, subject to the uses of any company when organized.

I herewith, also, transfer to you a memorandum-book, in which the landed proprietors on the route have made a gratuitous donation of the right of way for the road. This document was willingly signed by every person to whom I presented it; being every person owning land on the route found at home, with only one exception.

To conclude: it results from my survey and investigation, that a route for that portion of the proposed New-Orleans and Opelousas Railroad, lying between Thibodeaux and Berwick's Bay, has been found much more favorable, either as regards the nature of the ground intervening, or as regards its approach to an air line, than had been expected. There are no formidable obstacles to be overcome, and, in my opinion, the whole work may be constructed between said points, in the most durable and permanent manner, including bridges, culverts, station-houses, and depots, sufficient for the working of the road, at a

cost not exceeding two hundred and seventy-five thousand dollars.—*Phelps' Survey.*

RAILROADS IN LOUISIANA.—**PROPOSED ROUTE OF A ROAD TO OPELOUSAS AND TEXAS.***—Sir: The enthusiasm that prevails at the present time on the subject of railroads in our state, and the favor with which was received a suggestion that I advanced to several influential gentlemen of New Orleans, relative to a new line of direct communication by railroad between the city and the town of Washington in the parish of St. Landry, induce me to take the liberty of submitting a rough outline of the proposed route, through you, to the committee which, at the recent convention, was appointed by the president "to prepare an address, setting forth all facts and statistics they can gather on all railroad projects in which the state has a direct and immediate interest."

As it appeared to be generally conceded, prior to the assembling of our convention, that the scheme of a railroad communication between New-Orleans and Jackson, via Baton Rouge, had good prospects of success, and that the line of its route would be along the eastern bank of the Mississippi, passing within a few miles of a point opposite the town of Donaldsonville, it occurred to me, some time since, that a very advantageous modification might be made in the plan of communication by railroad between New-Orleans and Washington advocated by Col. Payne, by means of which these two important public enterprises might be made to lend a helping hand to each other, and work in concert towards the grand result aimed at by the convention, as set forth in their resolutions—the equal and mutual advantage of city and country.

The proposition made by me, accordingly, was to effect a connection between the two contemplated lines through a branch to be constructed from the Jackson road to the Mississippi, opposite Donaldsonville, and through a steam-ferry capable of receiving the train of cars from the Washington road at that point. The latter road, I suggested, should run as follows: from the point on the Mississippi just designated opposite Donaldson, and on the west bank of the Lafourche, down that bayou three miles, then leaving the bayou, through the Grand Bayou Pierre part and Grand River settlements to Grand river, twenty-one miles, Grand river to be crossed by means of a bridge; thence south westwardly to Grand Lake, nine miles; across that body of water, as across the Mississippi, by a steam-ferry; thence to the Teche, three miles, and then following the route proposed by Col. Payne, up that stream, through Frank-

lin, New-Iberia, St. Martinsville, Vermilionville and Opelousas, to the terminus at Washington, seventy miles,—a distance, all told, of 103 miles from the point of departure on the Mississippi.

In favor of the adoption of this line over any other which has yet been proposed, and more especially over that proposed by Col. Payne, many considerations of great weight may be offered. As my design is only to bring the attention of the committee on the subject, I shall content myself on this occasion with the briefest statement of the most prominent among them.

1st. By the route suggested by me, a saving of seventy-eight miles of road would be effected.

2d. Several very expensive bridges would be encountered.

3d. No deep swamps or trembling prairies would be encountered.

4th. Upon the construction of only twenty-one miles of road a direct communication could, within a few months, be established between New-Orleans and the Attakapas parishes, rendering immediately available a largely productive revenue.

5th. There would be secured to the Washington road the strenuous support and cooperation of all capitalists already enlisted in building up the Jackson road.

But, however cogent and unanswerable may be these reasons, they will still be held secondary by the gentlemen of the committee who represent New-Orleans, to any additional consideration, which, in as far as they are concerned, must prove conclusive. The line now recommended, through its connection with the Jackson road, may be regarded as terminating substantially and in effect in the city, and its completion would, of necessity, go far towards enhancing the prosperity of New-Orleans; whilst it must be manifest that the inevitable result of the success of Colonel Payne's scheme would be the founding at Algiers of a dangerous commercial rival. Col. Payne's project will not, therefore, I feel assured, receive any encouragement from the moneyed men of New-Orleans, and without their support the country is entirely incompetent to undertake it. The route that I suggest harmonizes all interests, and should meet with equal favor on all hands.

You will permit me a few additional remarks in explanation.

1st. By the adoption of the line proposed by me, a saving of seventy-eight miles in the length of the road—sixty-two miles east and sixteen west of the Mississippi—would be effected, as already stated. Now, accepting Col. Payne's data, you will perceive that by this means alone an economy of \$780,000 is realized.

2d. But a further reduction of cost would be secured by the avoidance of the necessity

* This route has had but few friends, and has attracted but little attention, and yet we have always believed its merits to be very great.—*Editor.*

of constructing two expensive bridges, which would have to be erected on Colonel Payne's route : one over the Lafourche, which would scarcely be built for less than \$100,000, and another over the Bayou Boeuf, which would call for the outlay of nearly \$50,000.

3d. It should be borne in mind that it is precisely over that portion of this Algiers route, which lies between New-Orleans and the Teche, that the nature of the country presents the most formidable obstacles to a railway communication. I do not hesitate to assert, from my own personal knowledge, that the swamps of this region will present almost insurmountable difficulties to the passage of the road, in the direction indicated by Mr. Payne, and must increase far beyond the amount stated by him [\$10,000] the average cost per mile.

It is susceptible of demonstration, that by adopting the line advocated by me, these several reductions in the cost of the road could be effected, amounting in the aggregate to near \$1,000,000,—a sum in itself more than sufficient to finish the other road its entire length. Are there any counterbalancing advantages attending the selection of the Algiers route which should entitle it to the preference of the committee? I have been able to discover none which could stand the test of serious examination. It has indeed been argued, and even assumed, that the support of the parishes of Lafourche Interior and Terrebonne would be gained to that project of communication, and a good deal of influence has been assigned to the assistance which they would furnish; but it seems to me clear that this has been done on premises unworthy of confidence. Lafourche Interior has an excellent channel of navigation open for the greater portion of the year, and at no time more than partially interrupted.

To imagine that for the exclusive advantage of a dozen planters who would reside on the line of the road, as it traverses that parish, the remainder of the inhabitants could be induced to submit to the system of taxation upon which so much stress is laid by some enthusiasts, is perfectly visionary; nor is it any less visionary to imagine that any considerable amount of Lafourche sugar would ever take this road to market, inasmuch as at that season when our crops are shipped to the city, the Lafourche planters have, for the larger portion of the time, a cheaper, safer, and more convenient communication with New-Orleans than could be furnished them by artificial outlets. Terrebonne's geographical position is different, and the planters of that parish unquestionably rest under such inconveniences as might lead them to sustain Mr. Payne's projected road. But it should be recollected that they could be but partially benefited, unless, as suggested by a delegate from that parish to the convention, a branch

road were constructed along the Bayou Terrebonne, to connect with the main trunk of road, which branch must involve an expenditure of at least \$200,000, to be added to the stupendous cost of the work, admitted by Colonel Payne's report to reach already to \$1,000,000.

4th. You will observe, that at a smaller cost than would be required for the erection of the two bridges already spoken of, over the Lafourche and the Boeuf, and other bridges required along the route, by the construction of twenty-one miles of road from the Mississippi to Grand river, there could be opened within a year, to the people of the Attakapas, a mode of cheap and easy communication with the city—which could not fail to bring in at once a handsome revenue, and, at the same time, confidence in the practicability of the undertaking. If you will refer to Col. Payne's report, the committee will be competent to judge approximately of the amount of travel and freight available as a source of profit. On the other hand, the committee should not lose sight of the fact, that should the scheme of Col. Payne be adopted, it would be utterly impossible to derive the least benefit from the road until after its completion from Algiers to the Lafourche, a distance of sixty miles, which, as I have stated, could not be done at a smaller preliminary cost (not including the bridge) than \$700,000.

In conclusion, an act of the legislature has authorized the incorporation of a company to run a railroad from the Mississippi to Grand river, and the state has liberally donated such lands as it possessed along the route; the different property-holders through whose possessions the road would pass, have also volunteered the gratuitous cession of such lands as might be needed for the use of the road. An act has been signed for the formation of a company to build the road; but owing to the temporary excitement created in favor of Col. Payne's project, no steps have been recently taken to urge this scheme before the public.

But now that the question of opening a railway communication between New-Orleans and the western portion of Louisiana has been transferred from the decision of popular assemblies to the calmer and wiser judgment of a select committee of practical men, I have thought, as one of those who are interested in having the merits of the route via Donaldsonville fairly tested, that I would draw up for the use of the committee a brief and incomplete sketch as is herein presented to them, being fully prepared, however, when they may deem it advisable, to lay before them a more detailed statement of my views.

I am at this moment engaged in making a survey of the route adopted by the incorporated company referred to; plans of which

survey, and of others representing the entire route as suggested, will be forwarded to the committee, should they feel disposed to inspect them.—(By A. J. Powell.)

RAILROADS IN LOUISIANA.—PROJECT OF A RAILROAD FROM VICKSBURG, VIA MONROE AND SHREVEPORT, THROUGH THE INTERIOR OF TEXAS, SUBMITTED BY THE DELEGATION OF NORTHERN LOUISIANA. REPORT.—This road has been projected for the purpose of developing the northern part of the state of Louisiana, and the northern, eastern, and middle portions of Texas, securing their trade to the city of New-Orleans, and to add another section to a great national road. It will pass through a tier of parishes in this state, containing over four millions of acres of rich, fertile land, fully equal to the best lands in the world for the growth of cotton. The whole of this land is arable, with the exception of a comparatively inconsiderable portion subject to annual inundation. These parishes now produce about 180,000 bags of cotton. Without the aid of a railroad this amount is not likely to be increased. Indeed, nothing but the unsurpassed fertility of the soil could sustain their present population, in the absence of any other means for getting their produce to market, and obtaining their supplies, than is afforded by small streams of water, un navigable for many months in the year, and which, at best, meet the demands of a very limited portion of the country in question. Take, as an illustration of this statement, the parish of Caddo, which is more favorably situated for navigation than any other of the northern parishes. For several months during the year just closed the good people of this parish have been six weeks from New-Orleans "in due course of mail." Flour has been selling at \$12 per bbl.; bacon, 16 cts.; sugar and coffee, 12 and 14 cts.; lard, 25 cts., and other family supplies in proportion. Merchants have hauled their goods from the Mississippi, in wagons, and commenced selling them about the time their bills for the purchase of them began to fall due. Other goods, purchased for the Shreveport market, have been met at New-Orleans, shipped up the Mississippi, and opened at various points on that river, in markets unsuited to their quality, and forced sales made to sustain, if possible, the credit of the purchaser. The whole cotton crop of the parish is at this time under shelter at the gin houses, or locked up in the warehouses at Shreveport, waiting a rise in the Red River. These extravagant prices—these ruinous delays—this unnatural course of trade, and general derangement of business calculations, return upon us with the regularity of the business seasons, and must continue to recur so long as our only dependence is upon the uncertain navigation of Red River. Even with all these disadvantages, the fertility of the soil in this parish has

induced its rapid settlement. The Indians were removed so late as 1839, and the same year the lands were offered for sale by the government. The parish now contains six thousand slaves. Fifty thousand acres of land have been brought into cultivation; and she will send to market this year, as the produce of her own soil, twelve thousand bags of cotton. Shreveport, which is marked out by its geographical position as the centre of trade, not only for this parish, but for a vast extent of country to the west of it in Texas, has a population of twenty-five hundred inhabitants, and is the second place in the state in point of commercial importance. The trade between Shreveport and New-Orleans already amounts to several millions. But the planters of Caddo parish, and the enterprising merchants of Shreveport, are struggling against adverse circumstances, under the weight of which they must finally yield, unless some scheme is devised for their relief. There are 191,000 acres of uncultivated land in this parish, held by private citizens, and a large amount still unsold by the government. When a fair proportion of this shall have been brought into cultivation, Caddo parish will send one hundred thousand bags of cotton to market. The limits of this report do not permit a detailed statistical statement of each of the parishes through which the road is projected; and we have selected Caddo, because it is about an average parish in size, present wealth, and production—and because more favorably situated than most of the other parishes; the facts in regard to it demonstrate the absolute necessity of a railroad communication with the Mississippi to its continued prosperity. Other parishes, as Bossier, Claiborne, and Bienville, equally fertile in lands, are still more isolated in position, and must remain almost wholly undeveloped and worthless to the state, unless aided by railroad communication. This road would speedily develop this whole region of country; and if built, it is a very moderate and sober calculation to say, that within six years these parishes would send New-Orleans four hundred thousand bags of cotton. But the fertility of the soil, and the trade based upon its produce, are not the only elements of wealth this road will develop. Contiguous to the route are large and extensive forests of valuable pine timber. Upon the water-courses which unite to form the D'Arbonne, and those which empty into the Dugdemonia, and Black Lake waters, &c., are good water privileges, which may be used to propel machinery. This country is not, therefore, likely to remain entirely rural, but extensive manufactories will spring up along the road, and add another element to the wealth and prosperity of our state.

These advantages, so feebly set forth, might be deemed sufficient to engage the attention of this Convention, and secure its favorable notice; but the project looks beyond the limits

of our own state, and proposes to penetrate the heart of Texas between the 32d and 33d parallels of latitude, to open up the vast resources of that immense country, and secure to ourselves the advantages which always flow from enlarged views and a liberal policy. Here are thirty organized counties, partially settled, covering as many thousand square miles, and containing not far from twenty millions of acres of land. These counties produce at present about fifty thousand bags of cotton. More than half of this is grown in six of these counties, most conveniently situated to the navigation of Red River. The other forty-four counties are engaged chiefly in the stock business, and exported during the past season not far from fifty thousand head of beef cattle, and twenty thousand head of sheep. This business has been found profitable, and is rapidly on the increase. To this may be added for peltries \$200,000, and \$30,000 for beeswax. Some of these counties are erecting mills, and already produce considerable quantities of flour, which, however, is consumed in the country. To find a market, this flour is hauled two and three hundred miles in wagons. Northern Texas is one of the best wheat growing countries on the continent. The average crop is said to be thirty bushels per acre of a very superior quality. And it is worthy of remark, that, aided by the construction of the contemplated railroad, this country would put down flour in New-Orleans one month earlier than it is possible for any part of the country to do from which she now draws her supplies. The importations of goods, groceries, and family supplies, into this country, may be determined by the amount of their exports. The wants of this people are so urgent, that their purchases have no other limit than their ability to pay. In these estimates we have confined ourselves to those counties in Texas, the northern boundary of which reaches beyond the 32d degree of latitude, and which are pretty well advanced in settlement. To our other estimates should be added, a trade carried on with the southern portion of the Indian nations, which now finds a channel through Red River, and amounts at present to about \$200,000, and is susceptible of a large increase. If we look to the extent of this country, and its capabilities of future improvement, we shall see that it can no longer be neglected, unless we are determined to lie down in idleness and poverty, in utter disregard to the sources of wealth which the bounty of Providence has placed within our reach. Probably no other spot upon the globe, of the same extent, contains so large a proportion of rich and fertile land as the region of country of which we are now speaking. The road will scarcely pass over a section of land that will not reward the labor of the husbandman and contribute to its business and support. Who can calculate the future of this country,

and tell what it shall be, when its productive resources shall have been fully developed by a judicious system of railways? We have not even mentioned all the known sources of wealth which it contains. In some of the counties are extensive quarries of limestone, mines of salt, stone coal, and iron ore; and not far beyond the western limit of the country indicated, are mountains, said to abound in the precious metals, silver, gold, and platinum. The natural advantages of this country are becoming more generally known; and there is, in consequence, an immense tide of emigration pouring into it the present season; and not only is the number of emigrants very much increased, but they are of a better class, and take with them a much larger amount of negro property. So that the population, wealth, produce, and trade of this country are increasing in an arithmetical ratio. A very large proportion of the cotton grown in these counties is sent to this city at an average cost of \$4 per bag. In most of the counties the cost of transporting cotton to market so far exceeds the profits of planting that it is not attempted and should the present low prices continue and the building of this road be delayed a few years, planting will be abandoned, and the negroes removed near the Gulf in western Texas. These people receive their supplies at the same heavy cost for transportation, and this double tax necessarily makes them very small consumers.

There is another view which the undersigned have taken of this route. It is projected on the same line of latitude with Charleston, Montgomery, Vicksburg, Monroe, Shreveport, Marshall, Dallas, El Paso, and San Diego. If ever the Atlantic is connected with the Pacific by railway, it must be upon this line. No other route presents so few obstacles, or combines so many advantages. It is central in geographical position, crosses the continent at the narrowest point, is far enough south to avoid the snows and frosts of winter, and far enough north to strike the rivers which empty into the Gulf at practicable crossings. It will best accommodate the different parts of the country; and to it cities and states, north, east, and south, must all come, who seek to connect themselves with the trade of California. When the connection shall have been formed between Jackson and Montgomery, this great central road will be connected with all the principal cities in the United States; and like the great central artery of the human body, it will infuse life and vigor into every one of its branches, and animate with health the remotest members of this great confederated body of states. The section of this route which more immediately engages the attention of the undersigned, is deemed entirely practicable. Steps have been taken to procure a survey of the route; but as this has not been done, we are happy to be able to lay before

the convention the opinion of Professor Forshey, given in the correspondence below.

"NEW-ORLEANS, Jan. 5, 1852.

"DEAR SIR :

"You are informed that the friends of internal improvement in the northern part of Louisiana, have projected a railroad from Vicksburg across the state, by way of Monroe and Shreveport. The information which has been collected, leads the friends of the road to believe that no great difficulties present themselves on the route, and that, taking the whole line together, it will be an easy one. You are also aware that, by orders of the government, a route has been surveyed, quite recently, from Lake Providence to Fulton, and it is understood a low estimate has been made of the cost of this road. I believe you once surveyed the route to Alexandria a little lower down than Monroe. You also have intimate knowledge of this whole region of country.

"Will you be good enough to inform me what is your opinion of the practicability of the proposed route? And, if it will not trouble you too much, furnish a rough estimate of the probable cost of the road?

"Have the friends of this enterprise selected the best route to cross the state, and develop the resources of the northern parishes? Or is there any better or more practicable route?

"Your early attention to this is solicited, and will much oblige the undersigned, and many, the friends of internal improvement in our state. Very respectfully, &c.

"C. G. YOUNG."

"CARROLLTON, LA., Jan. 6, 1852.

"DR. C. G. YOUNG :

"DEAR SIR,—Your note of yesterday is at hand, asking my opinion in regard to the practicability of constructing a railroad from Shreveport, on the Red River, to Vicksburg, on the Mississippi, via Monroe on the Ouachita.

"The questions you ask I shall answer, as I suppose, of course, they were intended purely as a professional matter, without entering into questions regarding its utility, which are, doubtless, better understood by yourselves than I could present them.

"I answer as to practicability, that there is on the whole route nothing approaching very near to the impracticable.

"This line would be 180 miles long, and would keep within ten miles of the same parallel, namely, latitude thirty-two degrees thirty minutes, all the way.

"Commencing on the east bank of Red River, opposite to Shreveport, the best route would cross the Bayou Bodcan, below the

lake, two or three miles, and pursue a line, nearly direct, to Minden on the Dauchete: thence deflecting a little northward, to avoid the broken lands about the head waters of the Black Lake Bayou, it would pursue the summit ridge nearly due east, between the waters of the D'Arbonne on the north, and the Dugdemona and Castor on the south; and without crossing a single stream large enough to have a name, in 75 miles, would reach the Ouachita river, opposite Monroe, in precisely the same latitude with Shreveport.

"From Monroe, the best line would continue eastward, not far from the township line of T. 7, 8, north, crossing the Lafourche Bayou and Boeuf River, a little south of the extreme south corner of the Bastrop Grant, the Bayou Macon, and Joe's Bayou, in the middle of T. 7, and thence run along the bank of the latter to the nearest bend of the Tensas river: along the bank of the Tensas, and across its bend, the line would cross that river at or near the north line of T. 6, and the Roundaway Bayou at Richmond, north of the mouth of Walnut Bayou; and thence eastward, the line would reach the river bank, on the Mississippi, at some place between Young's Point and the estate of General Dunlap—thence it would keep near the bank of the river to a point opposite Vicksburg.

"The greatest difficulties on this route are not in the construction of a railway track upon firm ground, without any considerable excavation or embankment. This may be done at the minimum, or near the minimum cost of railway construction. The abundance of timber on the way at nearly every portion of the line, and the slight grades required, give ample assurance of this.

"The true difficulties consist, first, in the bridges or crossings of several large streams; and, second, in the character of the overflowed region to be crossed.

"1st. There will be five first class bridges to be constructed on the route; and if built in such substantial manner as are common on similar streams, they must cost a sum equal to about six miles of road each; and three bridges of the second class, equal each to two miles of road, which may be estimated in all as increasing the cost of the whole road above the minimum, a sum not less than \$350,000.

"The next difficulty is a much less one as to increased cost. It would require that the road should be built on tressel-work, through the Lafourche swamp, through Bayou Macon and Tensas swamps, a distance which I cannot venture to name without an actual survey.

"But this necessity results from the direction of the route, which is at right angles to the trend of the alluvial planes, and hence across the drainage. Continuous embank-

ments cannot be constructed without manifest injury to the drainage of the country.

"Tressel-work, for elevations of 3 to 6 feet, would increase the minimum cost of the road about 20 per cent. per mile, for the number of miles so constructed. It is a vague estimate, but I suppose that \$50,000 would be a sufficient sum to meet this contingency.

"According to this estimate, it may be assumed in general terms that

180 miles railroad track, culverts, and stations.....	\$1,800,000
3 bridges, first and second class...	350,000
20 miles tressel-work, &c.,.....	50,000

Total probable cost of the road...\$2,200,000

"I must beg, my dear sir, that you will take these as crude opinions, based upon a very good knowledge of the country, true, but without any surveys upon the route you designate; and I would not be willing to have these opinions arrayed against any others resulting from careful surveys in the future, made by myself or other competent engineers.

"Very faithfully your obedient servant,

"CALEB G. FORSHEY,

"Civil Engineer."

The government of the United States is interested in a most direct and unmistakable manner in the construction of this road. Its treaty stipulations with Mexico, and its obligations to protect its own citizens, require a line of military posts to be kept up on the frontiers of Texas and Mexico. Five regiments of soldiers are now stationed upon these lines, and the number will probably be increased this winter to eight. The transportation of supplies to these stations will make a heavy drain upon the treasury of the United States, and render indispensable a considerable increase in the appropriations for the army. From data furnished the undersigned from reliable sources, they have been enabled to form such estimates as to place it beyond doubt, that the mere freight and transportation of supplies to these stations will cost the government more than a million of dollars annually. We are aware that this statement will startle persons unacquainted with the difficulties of the country. But the estimate is below the actual cost. The Secretary of War mentions that more than forty dollars has been paid on the transportation of a barrel of flour. In one instance the government engaged a man to haul supplies from St. Antonio to El Paso, at \$16 50, who threw up the contract as a bad bargain.

There are other ways in which the federal government will be profited. With the facilities which the road would afford for con-

centrating her forces, the country may give its citizens a far more efficient protection with a reduced number of soldiers. Indeed, a railroad would develop a population which, in a few years, would supersede the necessity of keeping up these stations at all. This was the effect in our own state of opening the navigation of Red River. More than this, the same population would become consumers of imported goods, paying duty, and thus the road will augment the revenue of the government, at the same time that it lessens its expenditures. The people along this road are alive to the subject. Enthusiastic meetings have been held in many of the parishes in northern Louisiana, and the counties mentioned in Texas, in all of which the people have passed resolutions in favor of its immediate construction. In addition, large conventions have been held in Shreveport, Monroe, Marshall, and Palestine, in which delegates representing quite a number of parishes and counties have conferred, and united in giving expression to the public sentiment. Such is the state of feeling upon the subject, that private citizens have offered to donate a portion of their land to secure the building of the road. In submitting this report, the undersigned would conclude it by recommending the construction of this road, as important to a numerous people, inhabiting a large and extensive region of country, prolific in sources of wealth, situated in northern Louisiana, in middle, western, northern, and eastern Texas. That it is important to the city of New-Orleans, as opening a channel through which she may secure to herself almost the entire trade of the country in question—a trade which at present amounts to several millions, and which is susceptible of an indefinite increase. The interest which the undersigned feels upon this subject induces a pause here—to observe that the position which New-Orleans now occupies, in regard to this trade, is one of peril. Unless some artificial means be devised to facilitate and cheapen transportation to and from that portion of this country lying west of Shreveport, its entire trade will soon be diverted into other channels.

We have reason to believe that Texas will look with favor upon this route. It has already been mentioned that a large number of her most populous counties have held meetings and passed resolutions in favor of it, and instructed their representatives accordingly. We have also reason to believe that Texas will not permit her territory to be penetrated by a railroad on the east, south of the 32d degree of latitude, and she will look with indifference upon any project that does not connect her by a direct line with the Mississippi river. To do this, the road must cross Red river at Shreveport, for there is no other practicable crossing for more than three hun-

dred miles. A road through the extreme northern portion of Texas, to Little Rock and Memphis, might, indeed, cross the river at Fulton. This road has already been spoken of. It is an important route, and will, no doubt, ultimately be built, but it can never compete for the transportation of cotton with a road running to Vicksburg. But to return. The information already given in this report, touching the nature of the country through which it shall run, shows this road to be important to the city of New-Orleans, as opening up to her a new and abundant source, from which she may supply herself with beef, mutton, flour, and other articles of living, of a superior quality, at reduced prices, whereby she may greatly cheapen the expenses of living of her citizens, and reduce the price of fare at her hotels and boarding houses, which will operate to produce a rapid increase of her population, both transient and permanent. This road is important to the state of Louisiana, because it will procure the settlement of four millions of acres of her vacant land, and add within a few years twenty millions to the amount of her taxable property. It is important to the federal government, because it will save her half a million annually in the cost of transporting supplies to her soldiers on the frontiers of Texas and Mexico. Finally, this road is deemed important to all sections of the country, as forming a part of that great central trunk which shall belt the continent, and with which all other roads on the continent must connect to perfect the system.

C. G. YOUNG,
Chairman of the Delegation from Northern Louisiana.

RAILROAD CONNECTION BETWEEN LOUISIANA AND TEXAS.—LOUISIANA AND TEXAS RAILROAD—OR HOW NEW-ORLEANS SHALL FIND SOURCES OF ABUNDANT WEALTH IN THE FUTURE TO ATONE FOR ALL OF HER LOSSES.*—Whilst the people of New-Orleans have

been casting about for a plank whereon to save themselves in the general shipwreck impending over the city, in the contests of more enterprising rivals for the commerce of the west, and have projected two great works of internal improvement to connect them with Jackson, Miss., and Opelousas, it is somewhat surprising that a railroad more important, if any thing, than either in its results, and equally practicable, *connecting some point of permanent navigation on Red River with the waters of the Trinity, in Texas*, has been almost entirely overlooked. The first suggestion of such a road, as an independent proposition, emanated from a meeting of the citizens of Shreveport, but a few days ago, (see August No. Rev.) and it is impossible that any one can rise from a candid and unprejudiced consideration of the subject, without the conviction that it is a work in which the people of this city and state have a deep and abiding interest.

The grounds for assuming some point on Red River as the Louisiana terminus, rather than Opelousas, which has hitherto been suggested, are, that the road will then pass, in its whole extent, through a richer and more prolific country, will bridge the rivers at higher and less difficult points, will be less in distance to the Trinity, and through more thickly settled regions; and, what is of more importance, *will be protected from the competition of the gulf cities of Texas*, after the improvement of the rivers of that state, or the construction of any railroads she may project in the direction of her sea coast.

Whether the point on Red River be Shreveport, Natchitoches, or Alexandria, or still lower down, is unimportant at present, and must depend upon the degree of activity evidenced by either of them, or upon future improvements in the navigation of the river. From any of those points cotton can be brought to New-Orleans on steamboats the greater part of the year, should

* At the time this was written, it was understood that the Opelousas Railroad would seek a connection with Texas somewhere on the parallel of 31°, and it was so declared in the circular for the convention soon after held at Burkeville, Texas. We regarded the projection unfortunate from the nature of the country to be passed, and thought that a Texas road should be entertained as a separate proposition, running on the parallel of about 32°. In this view we visited Shreveport, organized a meeting, and explained the views subsequently embodied in this article. Our action was misconstrued and misrepresented by some, and it was said we were opposed to the Opelousas road. The charge was groundless, since we had previously advocated it, and it never once entered into our head that a road from Red River would be at all antagonistic. On the contrary, Opelousas could be at once connected with it by a short road of fifty or sixty miles to Alexandria. The justness of our views has since been sustained by the action of the Opelousas company, in changing their route into Texas to a much more northwesterly line, and they will with-

out doubt reach Shreveport, the point of our departure. How advantageous would it be to begin from Shreveport to build west, as well as to build in the same direction from New-Orleans! Every mile west of Shreveport will bring new trade to us, and we shall thus forestall the movements which Galveston may be making in that quarter. Eventually, we have little doubt, a road will be built from the Mississippi immediately south of Red river, where it is admitted a route exists, free from all danger of overflow, on the shortest line to Texas. This road will cross the Mississippi at that point, and connect with the Jackson road in some of its branches, and produce and travel will be landed in the heart of the old Second Municipality. Now, however, that the "voted tax" makes the road a certainty, we are prepared, and so ought every good citizen to be, to unite with the present company heart and soul, and, without one single jar, press with them a road to Opelousas and to Texas upon any route whatever which may be decided upon. We pledge this cordially.

the supply be largely increased, at from 50 to 75 cents per bale—present freights being somewhat higher.

To the terminus selected on Red River, a branch of the Opelousas road, on its completion, would be constructed, so as to offer to travel and freight a choice of routes to New-Orleans, to be determined by their relative speed and cheapness.

The projected road ought, for obvious reasons, to be kept as a distinct and independent proposition from that to Opelousas, though both may in the event be connected. *It must rest entirely upon its own merits, and is capable of an entirely isolated existence.* By keeping them apart, the want of success in either will by no means jeopard the other. They may both be begun at the same moment, and proceed *pari passu* to completion.

Whilst New-Orleans is losing her trade upon so many points, and must have in the future little reliance upon the northwest, it becomes her, if possible, to open new channels of enterprise. Texas presents a virgin field, which, if she is wise, will more than compensate for all her losses. Few persons have a clear conception of the resources of Texas, and the important position she is destined to attain in the confederacy. To secure for our city an intimate commercial relationship with her would be a master-stroke of policy; but unless it is speedily done, *in the increase of the facilities of intercourse*, Texas will have a nearer connection with New-York than with Louisiana!

The area of Texas is about 400,000 square miles, a territory five times as large as New-England, and as large as all the other southern states put together. Her immense prairies, alluvial bottoms and canebrakes furnish an abundance of the most prolific soil for the cultivation of every southern staple. Her climate is superior to that of Louisiana or Mississippi, and her forests and timbered lands altogether unrivalled. Cotton of the finest quality is an abundant product in almost every part, and with the necessary labor her annual yield will soon exceed that of any other state. In the level regions, near the coast, sugar lands exist of finest quality. Tobacco, equal to Cuban, is almost indigenous. The same of indigo. Indian corn in great profusion is gathered, two crops in the year. Wheat, superior to any in the world, can be grown without practical limit, and with proper mills, Texas could supply a large portion of the demands of our market. The supply of cattle is altogether unlimited, and already thousands of head constantly stock our markets. These are but the leading items. There is silver ore at San Saba, gold upon the Atoyac, iron in various positions, lead, copper, &c. A salt lake is worked near the Rio Grande.

This splendid domain has hitherto scarcely attracted the attention of our people. During the independence of Texas, so much doubt and uncertainty prevailed in regard to the permanency of her government, that immigration and public wealth were not likely to thrive. To this succeeded war, and the golden hues of the California bubble, now dissipated, dazzled all eyes, and reared up for Texas a rival which at once deprived her of her beauty and attractiveness.

It is but two years since the reaction began, and already the most brilliant prospects are opened. Immigrants of the best class, from all of the southern states, with their capital and slaves, have been pouring in a constant stream into the state. They have entered by the seaports, or overland in great caravans. In the short period of twelve months, not less than 60,000 persons, about half of whom are blacks, have ascended the Red river from New-Orleans, or have crossed that stream at the numerous crossings at and above Alexandria. We may suppose, at least, 20,000 to have entered by the Gulf ports, which would give an increase of 33 1-3 per cent. to the population in one year. The tide continues to flow, and but a few years will show the state foremost in all the south, if not in all the Union. Most of these immigrants have settled in the vicinities of the Sabine and the Trinity.

This is the domain whose trade we would attract to New-Orleans, but which, by our supineness, we shall perhaps for ever lose. New-York had scarcely a brighter or more glorious prospect before her when she projected her great canal to the lakes. Yet New-Orleans will talk and sleep until this prize, too, has for ever escaped her grasp.

The country between the Sabine and the Trinity rivers, which is the seat of all the recent emigration, will, in the course of a few years, produce 300,000 bales of cotton, every one of which might be diverted to New-Orleans by the construction of this Red River Railroad, but every one of which will as certainly descend the rivers to the Texas sea-ports and be carried off to New-York without such a road. Here is a business of \$1,500,000 or \$2,000,000 profit annually, which it is in the power of New-Orleans to control, if she had but the enterprise of a Connecticut clock village. In addition to this there will be 100,000 barrels of flour, to say nothing of innumerable other products. The return trade will be equally large.

To secure this, nothing further is needed than the construction of a railroad 160 to 175 miles in length, through an almost level and unobstructed country, and which will not require an outlay of more than \$2,000,000.

Can this money be obtained? The principle of taxing contiguous lands is not adequate in any degree. Individual subscriptions cannot be relied upon in sufficient amounts, such is our deficiency of capital and enterprise. There are no valuable public lands in this portion of Texas. We can conceive of but one plan of realizing the ways and means.

1. A subscription to the stock of the company by the legislature of Louisiana to the extent of \$500,000.

2. A subscription on the part of the corporation of New-Orleans for \$500,000.

3. A subscription on the part of the legislature of Texas for \$500,000.

4. Subscriptions by individuals in Louisiana and Texas, in money and in lands, and also by the states of Texas and Louisiana in public domain, \$500,000.

I. A subscription by Louisiana will require a new constitution, it is true; but this our necessities loudly demand, and the people all over the state heartily desire it. If Louisiana would not see herself dwindle into one of the lowest class of states, she will have to adopt a larger and more liberal policy. She will have to do that, in fact, which almost every other state is now doing, to wit: *subscribe liberally to great public works* connecting her with her sister states. The wealth to result will far more than compensate. Individual subscriptions can effect nothing. Half a million to the Texas road, half a million to the Opelousas, and the same amount to the Jackson, would

be but a beginning. A wise policy would induce her to contribute double that sum in aid of the various railroad projections in which her people have so great an interest. Past failures, whilst they make us more cautious, should not be the ground for present inaction. Failures are incident to the beginnings of all enterprises. Our sister states have not been discouraged. Alabama is granting liberally to the Mobile road. Mississippi proposes large subscriptions. Georgia gave \$3,500,000 to her roads; Maryland \$5,000,000; Pennsylvania \$4,500,000; New-York \$4,000,000; Massachusetts \$5,500,000; Michigan \$6,000,000; North Carolina, to one road, \$2,000,000; South Carolina \$1,000,000. Why then should Louisiana fold up her arms in this great age of progress? Let any one answer.

II. In regard to New-Orleans, we have to make the same remarks. If she is to be a great commercial mart, nothing but railroads can now make her so. She will have to launch out millions. Taxation will not effect all that is necessary. The city credit must be restored by some means, and the city bonds issued. New-Orleans is not alone interested in roads terminating at her door. She must be liberal to all around. This is the policy of every other city. Even the smallest have expended millions. Take, in proof, the following table, showing the amount of railroad subscriptions by cities—their population and exports and imports in 1848, to and from foreign countries—exclusive of coin and bullion:

NAMES OF CITIES.	Population in 1848.	Am't stock subscribed and expend.	Average amount per head.	Capital in trade and Commerce.	Value of produce exported.	Value of imports.
Mobile and country.....	18,800	.....	.....	5,036,177	11,927,749	419,396
Savannah and country.....	18,700	2,800,000	155	1,849,490	3,670,415	217,114
Charleston and country.....	33,000	4,390,000	130	7,232,850	8,081,977	1,455,269
Richmond and Petersburg.....	36,000	3,800,000	98	6,712,100	3,691,412	213,681
Baltimore.....	130,000	12,000,000	92	8,484,788	7,129,782	5,343,643
Philadelphia.....	325,000	25,000,000	80	11,277,419	5,732,333	12,147,584
New-York.....	450,000	28,000,000	65	61,947,075	33,351,157	94,525,141
Boston and vicinity.....	225,000	32,000,000	160	16,293,230	13,419,099	25,637,767
New-Orleans.....	122,000	.....	.....	26,581,025	40,371,361	9,380,429

III. Will Texas subscribe any thing, or will she, in fact, regard the road at all with favor? We think yes. Though the interests of her gulf ports may be regarded as opposed, the feeling of the planting community will be in favor of the road. It will be the cheapest and best mode of reaching the largest market with the greatest capital. It will open at once immense regions to population and wealth, and enhance greatly the value of her lands. *It will furnish her only communication which Texas can ever have with the Atlantic states, except through the medium of the Gulf of Mexico, with its storms and its detentions.* In no other way can she connect herself with the great public works of the United States. In

no other way can she have access to the interior markets of the Union in the event of war and the blockade of the gulf. It will furnish the shortest and cheapest line of travel to Washington and the north. These considerations must influence the Texas legislature. Petty local influences could not bear against them. Truth must prevail, and the charter may be relied upon. In regard to *subscription*, the matter is somewhat different. Texas has actually no money. By scaling her debt, it is thought she can save rightly \$3,000,000 out of the \$10,000,000 appropriated by Congress. Could she not be induced to expend half of this in promotion of railroads, and would not the Louisiana road have an equal claim with

any other! Should the other proposition prevail, *i. e.*, to pay the whole debt, upon the condition its amount is expended by the creditors on state improvements, would not the case be still stronger in our favor!

IV. Out of the public domain of Louisiana and Texas, a large donation may be safely relied upon, and there is no doubt that holders of Texas lands on the line or route of the road would take large stocks, payable in labor or in lands. These lands, in the hands of the company, must at once bear a greatly appreciated value.

Who will make the initial movement in this matter? Not a day is to be lost. Here is a work vastly more important to New-Orleans than the road to Jackson or to Opelousa, or across Tehuantepec, important as all of these most unquestionably are. *It will bring us immense trade we cannot have at all otherwise*; and this may be said with the same propriety of no other road. Who will move? Will the people of Shreveport? No; we fear they are not yet out of the leading strings of the "plank road," and hearing the grateful tinkle of wagon bells, they are timid about the clatter of the locomotive! Will the people of Red River, generally? We trust so. We trust their neighbors of Texas, too, will advance the move. New-Orleans cannot be the last, unless the madness has certainly come upon her with which the inexorable gods ever inflict their victims. Let the ball once be started, and it shall only cease to roll on the shores of the Pacific.

Since writing the above, we are delighted to receive the address of T. J. Chambers, candidate for governor of Texas, in which he sustains the view we have taken that Texas will coöperate. The following extract will be read by every one of our citizens with deep interest:

"I propose that the first great route shall be marked out from a point on the Rio Grande, near the head of navigation, and opposite to the great thoroughfares and highways leading into the Mexican states, so as to run thence through the city of San Antonio, by Austin, the capital of our state, and across all our chief rivers at or near the head of navigation, to the Louisiana line near Red River, where it would easily be connected with the system recently projected in that state, and open a communication with the city of New-Orleans; while it would give the whole of the interior of our state the benefit of the navigation of all our rivers, and through them an easy access to any part of our coast. To this great track any number of branches might be attached, which local convenience or public policy might require; and amongst the most important of these would be that already projected from San Antonio to the coast, and the portions of the main track to be thus completed would be

those passing through the eastern and middle counties, to give them the benefit of the improved navigation of our rivers.

"I propose that the other main track shall descend from El Paso on the Rio Grande, by the city of Austin, nearly on a right line to Galveston Bay, with which private enterprise would connect it at various points. This route, prolonged at the other end on the same right line, would pass by Gila to San Diego on the Pacific. And I do not entertain a doubt that this is the shortest, best, and, indeed, the only practicable route for a railroad across the continent from our Atlantic to our Pacific coast in California.

"Thus Texas holds in her grasp, not only the commerce of one half of the Mexican states, and in a great extent, the destinies of the city of New-Orleans, but the control of the vast wealth which is to flow from California and the Pacific ocean across to the Atlantic. *It is for Texas to determine whether or not the great movement for internal improvements in the state of Louisiana, and the mighty capital ready to be employed to open a communication with the Pacific ocean, shall be turned to her own advantage, and made the foundation of a prosperity unequalled in any other country.* Intelligence has lately reached us that the Tehuantepec treaty has been rejected by Mexico, and it is for us to convert its failure into a most fortunate occurrence for Texas, Louisiana, and all the southern states, by promptly adopting and vigorously prosecuting the system of internal improvements which I have proposed. The two great railroad routes suggested are sufficiently important, in a national and military point of view, to command the coöperation of the government of the United States. *But we should make the first vigorous movement ourselves, and we shall command and control the action and coöperation of that government and of the state of Louisiana, which will seek to avail themselves of the benefits of our enterprise, by extending our work beyond its limits.* But if we measure the proposed system by a narrower scale, it will be found that the completion of any portion of it will be attended with great benefit, and that one part may be added to another with increasing advantages, until the full development of the whole may be achieved."

RAILROAD ACROSS TEHUANTEPEC.
—SIR:—Your favors of the 6th and 27th of February, and 27th of March, are just received by the Alabama. After my report of the 14th January, and other letters from Chevela, I again addressed you from Boca del Monte, communicating the progress of the survey up to that period. This was supposed to be the latest date which would reach Minatitlan in time for the Alabama's third trip. We were

in daily expectation, for a month or more, and for this cause I wrote no further.

I have now to state that the survey is nearly completed, as far as I consider necessary for present purposes, and that most satisfactory results have been obtained. I will briefly communicate the results.

Mr. Temple's survey of the river shows that he considers it navigable, *at all stages*, as high as Suchil, for light draught steamers, and to Paso Sarabia, or higher, during the rainy season. He has been on the Pacific coast for a month; and, though he has not yet made the soundings, he has no doubt about the depth of water, and considers either the Ventosa or Salina Cruz available for a harbor, the latter preferable. In fact, this coast may be considered as practicable as many or most landlocked harbors on the Atlantic; for the prevailing and strong winds are from the north and off the shore, against which, of course, the land affords protection; and though the surface of the water may be rough, and a strong surf breaks on the shore, yet nothing like a sea is raised, and steamers or vessels can lie in perfect safety. The southerly or southeasterly winds, which occur in certain periods of the summer, are little more than squalls, and not at all dangerous. I do not think break-waters absolutely necessary, but eventually some arrangements would be made for landing and receiving passengers and goods with facility. In the commencement of the enterprise, good *surf-boats* are all that would be necessary. I think there can be *no doubt* about the *entire practicability* of this coast. I will now speak of the railroad route.

From the Ventosa to the foot of the mountains we have level plains, offering a choice of routes, plenty of stone and timber at hand, of the best quality for the structure. The cost of this portion (about thirty-five miles) will be very trifling. The ascent of the mountains by the Masahua Pass has now been surveyed, and the line run through beyond the Sarabia. The result is found to be, that a grade of forty or fifty feet per mile can be carried up the Pass, and that the difficulties are not greater than have been surmounted on roads in the United States; thence to the "Lomas de Xochiapa," say fifteen miles, the ground is easy or moderately broken. Through the "Lomas de Xochiapa," say ten or fifteen miles, more difficulties again occur, but they are not extraordinary; thence ten or twelve miles farther to the Sarabia, the ground is perfectly easy. Through the forest country, from "Paso de la Puerta" to the Jaltepec, and thence through to "Jesistepec," some difficulties will be met with, but I fancy nothing serious. The survey has, actually at this moment, been extended from the foot of the Masahua Pass to the Sarabia, and thence Mr. Avery's party is extending it towards "Paso de la Puerta" and the Jaltepec. Mr. Williams's party have just

gone down to the Jaltepec, towards Jesistepec. All this will, I think, be completed in a month, and the parties ready to return by the middle or latter part of May. As Mr. Avery has already made a reconnoissance from Minatitlan to Jesistepec, and found the ground to offer no difficulties, I do not consider an actual survey necessary for present purposes, as the question is plain and the ground easy. In addition, in my letter from "Boca del Monte," I stated the expediency, in the first instance, of commencing the line on the Jaltepec.

Taking the whole extent of the road into consideration, the ground is remarkably easy, and timber, stone, &c., are at hand in abundance; and the right of way (so serious an item in the United States) will have cost little or nothing. No estimate can be made at present, but I think I am safe in saying that the means appropriated by the committee are ample. In relation to the lands connected with the grant, I think it safe to say, a finer tract cannot be found in the world.

An immense number of invaluable productions (comprehending all, or almost all, the valuable productions of tropical climates) can be raised here with the greatest facility, while the forests abound with natural productions of great value. Throw in an enterprising population here, and the Isthmus would become the garden spot of the world.

In relation to opening a travelling route, I think it is only necessary to establish steamers, connecting with the two coasts a small steamer, or steamers, on the river, and the horse or mule transportation across would soon be supplied. Passengers can be got across the Isthmus with such means in six or seven days from Minatitlan to the Pacific. There are people on the Isthmus ready to establish the land communication the moment the steamers commence running; so that this part of the business will give the company no trouble. In conclusion, there can be no exaggeration in saying, that this is the route, and the one which will supersede all others; and leaving out of consideration the value of the route, the value of the lands, and the local wealth to be produced, would almost pay the building of the railroad, and be an immense contribution to the commerce of New-Orleans. I believe, moreover, that no statement or estimate you have seen made as yet realizes the full value of this route and grant; it can scarcely be appreciated. I would say, too, that the people on the Isthmus are all friendly to the utmost degree to the enterprise, and that large subscriptions of stock can be obtained by an authorized agent. I should mention that rich beds of iron ore exist here, and that indications of silver are apparent.

Reports will be made on this subject; a geological examination has been made, and such researches as could be made, with our

means, into the natural productions of the Isthmus.

I would mention officially, that I am convinced that Mr. Trastour's operations on the Pacific have been carried on with great zeal and energy, and under great disadvantages. Mr. Temple states that his charts are excellent, and perfectly reliable. I feel it a duty to state this, as so much has been circulated to his disadvantage.

I think the surveying parties will get through their work by the end of this month, and will be ready for transportation at Minatitlan by the 15th May.

Of the funds now remaining available here, there are about \$7,500 still in Tehuantepec, \$5,700 here, and \$3,000 still remaining in Vera Cruz, say \$16,200 in all, which will be, I think, sufficient to pay the expenses of the parties, and I should think two thirds or three

fourths their salaries.—I am, very respectfully, your obedient servant,

J. G. BARNARD, Bvt. Major U. S. A.

RAILROAD COMPETITION—ITS INFLUENCE UPON NEW-ORLEANS TRADE.—But what is it to New-Orleans, whether Nashville and Louisville connect themselves by railroad with Charleston? Much in every way, but in the way to which she is perhaps most sensible, very much. In 1849, the cars of the Western and Atlantic Railroad (Georgia), connecting Chattanooga with Savannah and with Charleston, commenced active operations on the basin of New-Orleans, in northeastern Alabama and southeastern Tennessee. Now the extent of this operation on the cotton receipts of New-Orleans may be shadowed out in the following tabular facts:

RECEIPTS OF COTTON AT THE SEVERAL PORTS FOR 1848, 1849 AND 1850.

	RECEIPTS IN BALES.			RECEIPTS IN PER CENTAGE OF TOTAL CROP.		
	1848.	1849.	1850.	1848.	1849.	1850.
New-Orleans.....	1,191,000	1,094,000	797,000....	50.7	40.1	38.1
Mobile.....	486,000	519,000	351,000....	18.6	19.0	16.8
Other Gulf ports.....	194,000	239,000	200,000....	8.8	8.8	9.8
Savannah.....	255,000	391,000	344,000....	10.9	14.3	16.4
Charleston.....	261,000	458,000	384,000....	11.1	16.8	18.4
Other Atlantic ports.....	11,000	28,000	19,000....	0.5	1.0	0.6
Total crop.....	2,348,000	2,729,000	2,091,000	100.0	100.0	100.0

New-Orleans has therefore *lost*, from the date of the opening of the Chattanooga Railroad to the date of the last annual return of the cotton crop, 13.8 *per cent.* of the total crop, while Savannah and Charleston, the termini of that railroad, have *gained* within that time 12.8 *per cent.* of the total crop. It is unnecessary to add another word to this: the figures are a very legible writing on the wall. But

what will New-Orleans lose when this Chattanooga road is extended into northeastern Alabama, and into the heart of Tennessee? Yet both extensions are in progress, one approaching to completion, and Charleston subsidies pushing it forward with giant strides! Verily, this cloud above the horizon of New-Orleans is black and boding.

For a great many minute statistics of the railroads of the southern and western states, embracing all the particulars of their construction, progress, cost, freight, etc., see the volumes of DeBow's Review, 1849-59.

APPENDIX.

CHICAGO—GROWING COMMERCE OF.—We subjoin a table of the value of imports and exports, from 1836 to 1848 inclusive:

	Imports	Exports
1836.....	\$325,203 90	\$1,000 64
1837.....	373,677 12	11,665 00
1838.....	579,174 61	16,044 75
1839.....	639,980 26	33,843 00
1840.....	562,106 20	228,635 74
1841.....	564,347 88	348,862 24
1842.....	664,347 88	659,305 20
1843.....	971,849 75	682,210 85
1844.....	1,626,416 00	785,504 23
1845.....	2,043,445 73	1,543,519 85
1846.....	2,027,150 00	1,813,468 00
1847.....	2,641,852 52	2,296,299 00
1848.....	8,338,639 86	10,709,333 40

CINCINNATI.—Imports, 1851-1853, (for Exports see Appendix to vol. I.), for the years ending August 31st.

ARTICLES	Total Imports	Average Value	Total Value
Apples, gr.....	71,182	\$1 60	\$106,844
Beef.....	1,609	9 00	14,481
Beef.....	1,145	15 00	14,885
Bagging.....	71	2 00	142
Barley.....	89,994	0 45	40,447
Beans.....	14,137	1 60	21,219
Butter.....	10,203	25 00	265,075
Butter.....	13,720	13 00	178,360
Blooms.....	4,036	50 00	201,800
Bran, &c.....	131,014	— 50	65,507
Candles.....	653	2 00	1,632
Corn.....	653,788	— 30	196,136
Corn Meal.....	8,640	— 40	3,456
Cider.....	874	8 00	2,692
Cheese.....	46	12 00	552
Cheese.....	241,753	2 40	604,441
Cotton.....	12,776	50 00	638,800
Coffee.....	95,732	17 00	1,637,444
Codfish.....	431	25 00	10,775
Cooperage.....	135,118	— 60	81,070
Eggs.....	10,544	4 00	42,176
Flour.....	511,042	8 20	1,635,334
Feathers.....	6,716	12 00	80,592
Fish, sund.....	20,076	9 50	190,722
Fish.....	1,075	2 00	2,150
Fruit, dried.....	—	—	—
Grease.....	24,877	9 00	49,754
Glass.....	1,936	15 00	29,040
Glassware.....	44,004	2 25	99,000
Hemp.....	36,692	4 40	16,265
Hides.....	18,334	25 50	467,517
Hides, green.....	54,647	2 40	27,269
Hay.....	54,905	— 41	1,557
Herring.....	9,270	2 50	23,185
Hogs.....	5,149	— 50	2,574
Hops.....	460,210	9 00	3,691,890
Iron and Steel.....	1,591	60 00	95,460
".....	194,107	1 45	291,160
".....	54,078	3 75	202,729
Lead.....	10,111	24 00	242,864
Lard.....	54,733	3 12	171,040
".....	36,047	21 00	756,987

ARTICLES	Total Imports	Average Value	Total Value
Leather.....	32,283	4 25	137,902
Lemons.....	11,384	9 60	102,456
Lime.....	4,434	5 00	22,170
Liquors.....	64,817	— 80	51,833
Merchan. and sund. pkgs.....	3,162	90 00	284,580
".....	—	—	—
Molasses.....	93,132	13 00	1,117,584
Malt.....	33,220	— 60	29,889
Nails.....	64,189	3 00	192,567
Oil.....	8,395	28 00	239,540
Oranges.....	4,647	6 00	27,980
Oakum.....	1,843	12 00	22,116
Oats.....	197,868	25 00	49,467
Oil Cake.....	247,400	— 04	1,537
Pork and Bacon.....	10,338	45 00	465,514
".....	1,987	22 00	43,714
".....	22,501	15 00	337,515
Pork in bulk.....	16,332,684	— 6	991,973
Potatoes.....	20,739	1 25	25,923
Pig Metal.....	22,065	24 00	543,570
Pim'o and P'r.....	1,455	13 00	18,525
Rye.....	58,317	— 50	29,158
Rosin, &c.....	14,184	3 50	49,844
Raisins.....	28,417	2 00	56,834
Rope, Twine, &c.....	3,903	5 00	16,015
Rice.....	3,782	25 00	94,550
Sugar.....	39,224	58 00	2,274,992
".....	15,237	14 00	213,318
".....	2,269	30 00	67,770
Seed, flax.....	48,074	3 00	144,222
".....	10,819	11 00	119,019
".....	304	1 60	456
Salt.....	91,312	1 30	118,705
".....	58,020	1 50	87,030
Shot.....	1,688	17 00	28,596
Tea.....	12,810	25 00	390,250
Tobacco.....	11,469	46 00	527,160
".....	1,996	4 00	9,984
".....	23,060	28 00	461,200
Tallow.....	5,930	15 00	88,950
Wines.....	4,482	35 00	156,670
".....	8,322	10 00	83,220
Wheat.....	377,077	— 60	226,432
Wool.....	4,569	50 00	228,100
Whiskey.....	272,788	6 75	1,773,122
Cotton Yarn.....	10,836	1 50	16,954
".....	167,092	1 75	692,507

Total Value.....\$24,715,331

NOTE.—In the above, we have not included Dry Goods, Hardware, Queensware, and sundry miscellaneous articles, which, with those mentioned, come under the head of Merchandise. It would be utterly impossible to make an estimate of these articles. Coal and Lumber are also omitted — no correct statement of the amount imported being obtainable. In the above calculation we have given as nearly as possible the correct average value, and we believe the aggregate is below rather than above the actual amount. The value of the total imports at this port is not less than forty millions.—Editor of Cincinnati P. O.

COTTON STATISTICS.

The following table has been arranged and published by W. F. Wright, Esq., Cotton Broker, New-York:

TOTAL RECEIPTS OF COTTON INTO THE VARIOUS PORTS OF THE UNITED STATES.							
1851-2	1850-1	1849-50	1848-9	1847-8	1846-7	1845-6	
New-Orleans*.....	1,373,464	933,360	781,860	1,093,797	1,190,735	705,970	1,037,144
Mobile.....	540,449	451,748	350,962	418,706	436,336	323,462	421,966
Florida.....	188,499	181,204	181,344	200,186	103,776	127,592	141,984
Texas.....	64,052	45,830	31,963	38,827	30,742	8,317	97,068
Georgia.....	325,714	322,376	344,636	391,372	284,825	242,780	194,911
S. Carolina.....	476,014	397,075	384,265	438,117	261,752	360,990	251,405
N. Carolina.....	16,242	12,928	11,861	10,041	1,615	6,061	10,637
Virginia, &c.....	20,995	20,757	11,500	17,550	8,932	13,991	16,982
Total Crop.....	3,015,629	2,355,297	2,666,706	2,798,596	2,347,634	1,778,651	2,100,636
TOTAL FOREIGN EXPORTS OF COTTON FROM THE UNITED STATES.							
1851-2	1850-1	1849-50	1848-9	1847-8	1846-7	1845-6	
To Great Britain.....	1,664,740	1,418,265	1,106,771	1,537,001	1,334,985	836,090	1,102,369
France.....	421,375	301,338	289,627	269,259	270,172	241,946	329,703
N. of Europe.....	168,876	190,402	72,156	165,458	130,848	75,080	86,093
Other F. Ports.....	184,947	139,606	121,601	159,226	134,476	93,128	118,028
Total.....	2,440,646	1,988,710	1,500,155	2,227,844	1,868,261	1,341,222	1,660,792
* Including receipts from Mobile, Florida, and Texas, the totals at New-Orleans for 1851 & 2 are 1,429,168 bales.							

* Including receipts from Mobile, Florida, and Texas, the total at New-Orleans for 1851 is 1,429,168 bales.

COMMERCE OF THE WORLD.

COUNTRIES	Imports	Exports
Great Britain.....	£100,000,000	£70,000,000
France.....	45,000,000	50,000,000
United States.....	45,000,000	40,000,000
Hamburg.....	22,000,000	20,000,000
Netherlands.....	22,000,000	18,000,000
Belgium.....	16,000,000	15,000,000
Russia.....	14,000,000	14,000,000
New South Wales.....	1,500,000	1,800,000
Austria.....	8,800,000	6,000,000
Brazil.....	6,600,000	5,500,000
Spain.....	6,000,000	5,000,000
Sardinia.....	9,000,000	6,500,000
Denmark.....	5,500,000	3,500,000
Cuba.....	5,700,000	5,600,000
Canada.....	4,000,000	3,000,000
Egypt.....	2,500,000	2,000,000
Sweden.....	2,300,000	2,300,000
Portugal.....	2,500,000	1,600,000
Java.....	2,000,000	5,000,000
Mauritius.....	1,200,000	1,200,000
Ceylon.....	1,300,000	1,500,000
Greece.....	1,000,000	800,000
Cape of Good Hope.....	1,100,000	500,000
Papal States.....	1,500,000	1,200,000
Bavaria.....	850,000	1,200,000
Van Diemen's Land.....	600,000	500,000
Total.....	£321,750,000	£287,000,000
Grand Total.....	£615,650,000	

MARINE OF THE WORLD.

The following authentic and highly interesting tables are from the Belfast (Ireland) Mercantile Journal:

NUMBER OF VESSELS AND TONNAGE BELONGING TO THE FOLLOWING COUNTRIES:

COUNTRIES	Tons	Vessels
Great Britain.....	4,144,115	34,090
France.....	595,344	13,679
Norway.....	537,058	3,064
Russia.....	—	750
Greece.....	150,000	4,000
Naples.....	100,000	—
Hamburg.....	82,053	286
Belgium.....	22,770	161
Cape of Good Hope.....	4,080	34
United States.....	3,553,451	—
Netherlands.....	396,924	1793
Austria.....	178,000	—
Denmark and Duchies.....	168,978	4,710
Papal States.....	133,402	1,590
Canada.....	68,553	683
Ceylon.....	30,828	609
Mauritius.....	12,030	125
Tuscany.....	27,598	773
Prussia.....	133,658	977
Total.....	10,118,841	—

THE SHIPPING AND TONNAGE ENTERED INWARDS AND CLEARED OUTWARDS FROM THE FOLLOWING COUNTRIES:

Countries	Entered		Cleared	
	Tons	Vessels	Tons	Vessels
Great Britain.....	6,113,696	31,249	5,996,978	29,011
France.....	1,887,291	15,264	1,430,085	13,868
Netherlands.....	1,099,771	6,939	1,136,864	7,017
Hamburg.....	730,596	4,094	729,186	4,114
Canada.....	628,399	1,699	636,407	1,732
Spain.....	579,475	5,206	470,973	4,622
India.....	406,479	868	522,056	1,128
Prussia.....	813,096	4,690	823,456	4,635
United States.....	4,382,639	21,643	4,361,092	21,905
Russia.....	1,323,080	6,401	1,177,994	6,197
Norway.....	774,885	7,969	806,766	8,160
Sardinia.....	700,000	6,000	799,000	6,000

STOCKS OF COTTON ON HAND IN THE UNITED STATES ON THE 31ST AUGUST.

	1852.	1851.	1850.	1849.	1848.	1847.	1846.
New-Orleans.....	9,758	15,396	16,612	15,480	37,401	23,495	6,382
Mobile.....	2,319	27,797	12,067	5,046	25,584	24,172	7,476
Florida.....	451	273	1,148	615	507	2,168	1,488
Texas.....	317	590	205	422	747	1,500	—
San'th and Aug'a.....	6,657	34,011	29,060	25,319	26,603	25,030	15,823
Charleston.....	11,146	10,953	30,698	53,806	14,655	20,655	8,769
N. Carolina.....	—	630	1,000	1,750	444	448	100
Virginia.....	450	33,410	60,720	67,035	41,967	83,259	46,539
New-York.....	45,796	3,850	15,436	15,250	16,130	26,650	19,550
Other N. Ports.....	14,282	—	—	—	—	—	—
Total.....	91,176	128,900	167,930	154,733	171,408	214,837	107,122

Countries	Entered		Cleared	
	Tons	Vessels	Tons	Vessels
Austria.....	547,228	—	562,722	—
Sweden.....	540,902	6,707	562,524	6,347
Belgium.....	366,967	2,424	349,658	2,868
Egypt.....	409,158	2,019	432,696	1,707
China.....	169,155	531	163,717	528
Other Countries	1,927,605	16,916	1,965,867	17,168
Total.....	23,338,620	130,638	22,738,901	136,409

LIBRARIES IN THE UNITED STATES.

FROM PROF. JEWETT'S WORK.

	No. of vols.
2,585 Public School Libraries.....	1,532,533
227 Academies and Professional Schools.....	380,909
142 Students' Libraries (in Colleges, &c.).....	254,639
126 College ".....	586,919
126 Social " (Popular).....	611,334
39 State ".....	268,937
34 Scientific and Historical Societies.....	138,901
10,190 Aggregate.....	3,753,964

The number of Libraries, each less than 1,000 volumes.....	971
Volumes in these Libraries.....	95,980
Number of Libraries containing each 1,000 volumes and upwards.....	423
Volumes in these Libraries.....	2,105,632
Average size.....	4,977

The number of volumes published from July, 1860, to July, 1851 in the United States, has been estimated by the publisher of the "Book Trade" to have been 1,308, embracing 213,049 pages, and forming 1,176 distinct works. The following is a popular classification.—*Norton's Literary Gazette*.

Novels and Tales.....	249
Juveniles.....	52
Gift Books.....	32
Poetry, Hymns, &c.....	80
Music Books.....	43
Theology and Religion.....	170
History and Travels.....	121
Biography.....	96
Political.....	16
Commercial.....	12
Science.....	50
Natural History.....	8
Metaphysics.....	8
Mathematics.....	17
Classical.....	7
Dictionary and Languages.....	13
School Books.....	30
Orations.....	5
Essays.....	11
Law.....	43
Medicine.....	47
Agriculture.....	20
Practical Mechanics.....	18
Fine Arts.....	6
Architecture.....	8
Manners and Morals.....	18
Social Economy.....	15
Miscellaneous.....	48

POPULAR VOTE OF THE UNITED STATES SINCE 1828.—To note how nearly equal great parties will be divided, we furnish the following statistics from the *Herald*:

Years	Democratic	Whig	Abolition	Seating
1828*	650,943	511,475	—	—
1832*	667,502	583,297	—	—
1836*	765,068	737,526	—	—
1840*	819,203	927,313	—	—
1844*	956,019	1,066,712	—	—
1848*	1,011,168	972,347	—	—

* Presidential elections.

Years	Democratic	Whig	Abolition	Seating
1840*	1,274,197	1,128,276	7,072	—
1841	1,048,662	1,025,339	—	21,869
1842	1,133,938	1,063,228	27,301	15,464
1843	1,073,157	963,433	66,374	26,881
1844*	1,372,809	1,318,622	62,169	—
1845	1,161,674	1,113,846	62,194	1,929
1846	1,165,432	1,132,788	79,979	6,305
1847	1,234,409	1,261,376	75,557	—
1848*	1,219,962	1,360,752	291,342	—
1849	1,223,371	1,231,368	76,578	6,071
1850	1,298,636	1,266,246	99,085	1,035
1851	1,397,757	1,292,233	78,143	3,096

POPULATION—GROWTH OF IN WESTERN STATES.

	1840	1841	1842	1844	1850
Wis.....	30,945	37,133	49,524	52,379	305,191
Iowa.....	43,119	51,834	69,478	99,900	192,214
Ill.....	478,163	584,917	692,653	764,806	851,476
Ind.....	6,986	764,262	822,598	868,175	968,416
Mich.....	212,267	246,331	264,395	306,437	397,654

Total. 1,449,373 1,676,447 1,918,648 2,083,800 2,735,945

PRODUCTIONS OF THE WORLD.

	GRAIN.	Quarters
Great Britain.....	60,000,000	—
Austria.....	26,000,000	—
France.....	62,000,000	—
United States.....	118,000,000	—
Russia.....	62,000,000	—
Canada.....	19,000,000	—
Spain.....	12,000,000	—
Other countries.....	45,500,000	—
Total.....	395,500,000	

	COALS.	Tons
Great Britain.....	28,000,000	—
United States.....	4,400,000	—
France.....	22,000,000	—
Belgium.....	4,500,000	—
New South Wales.....	45,000	—
Total.....	68,945,000	

	PRECIOUS METALS.	£
United States—California.....	14,500,000	—
Brazil.....	7,000,000	—
Russia.....	3,350,000	—
Great Britain (Silver).....	50,000	—
Australia.....	—	—
Asia.....	1,400,000	—
Total.....	26,300,000	

	IRON.	Tons
Great Britain.....	1,860,000	—
United States.....	—	—
France.....	600,000	—
Belgium.....	230,000	—
Russia.....	150,000	—
Austria.....	—	—
Other countries.....	65,800	—
Sweden.....	157,000	—
Total.....	3,042,800	

	SILK.	lbs.
Austrian Italy.....	7,000,000	—
Sardinia.....	2,500,000	—
Papal States.....	800,000	—
Two Sicilies.....	1,200,000	—
Tuscany.....	260,000	—
Prussia.....	620,000	—
Salonica.....	166,000	—
China.....	—	—
Total.....	12,547,000	

PROVISION TRADE OF THE UNITED STATES.

EXPORTS OF UNITED STATES PRODUCE TO GREAT BRITAIN.

	1836	1843, 3 mos	1849	1850	1851
Sperm oil.....	gals.	382,030	545,624	683,970	843,886
Whale oil.....	gals.	67,239	376,995	376,995	615,569
Whalebone.....	lbs.	197,167	451,466	556,984	476,770
Naval stores.....	bbls.	193,618	1,44,016	366,980	285,737
Alum.....	198	334	693	245	687
Beef.....	bbls.	—	72,590	60,510	54,755
Tallow.....	lbs.	—	5,998,227	2,254,613	4,195,866
Butter.....	lbs.	—	1,059,715	1,632,504	1,396,277
Cheese.....	lbs.	—	2,313,643	16,007,402	11,603,583
Pork.....	bbls.	—	3,240	111,365	9,258
Hams.....	lbs.	11,861	656,338	58,139,865	37,377,769
Lard.....	bbls.	—	4,569,404	21,388,265	31,692,691
Flour.....	bbls.	181	19,436	933,815	6,623,753
Cotton.....	lbs.	181	582,845,904	431,581,091	1,004,753
Tobacco, Mid.....	—	82,418	337,954	911,546	670,645,122
Wheat.....	buah.	—	—	1,072,680	592,533
Corn.....	buah.	—	—	5,077,220	2,760,329

EXPORTS OF PROVISIONS FROM THE UNITED STATES.

	Beef	Butter	Cheese	Pork	Hams	Lard
1840.....	19,681	1,177,639	723,917	66,281	1,643,397	7,415,249
1841.....	58,537	3,765,988	1,748,471	133,390	2,796,517	10,597,654
1842.....	42,361	2,063,133	2,456,607	180,032	2,516,841	20,105,397
1843.....	37,815	8,408,144	3,440,145	80,310	2,622,067	24,534,217
1844.....	106,174	3,200,911	7,343,145	161,629	3,886,976	27,746,355
1845.....	101,538	8,597,498	7,941,187	161,809	2,719,360	20,060,968
1846.....	140,253	3,430,660	8,175,890	180,422	3,006,630	21,843,164
1847.....	111,978	4,214,433	15,637,800	206,190	17,924,471	37,611,161
1848.....	103,719	2,751,086	12,413,305	212,309	23,551,034	49,629,539
1849.....	103,286	3,406,242	17,453,062	233,486	56,060,822	87,446,701
1850.....	95,307	3,876,175	10,361,180	165,206	18,627,302	19,983,082
1851.....	90,648	3,994,542	13,020,817	188,841	41,014,528	54,925,546

RAILWAY SYSTEM OF THE WORLD—1852.

Countries	Mileage	Sum invested
Great Britain and Ireland.....	7,000	£250,000,000
United States.....	10,280	66,500,000
Germany.....	5,342	66,750,000
France.....	1,818	49,000,000
Belgium.....	532	9,500,000
Russia.....	300	3,000,000
Italy.....	170	3,000,000
Spain.....	47	—
Total.....	25,398	448,750,000

The above tables refer to the latest date on hand, in October, 1851, says the *Belfast Examiner*.

ST. LOUIS—COMMERCE OF, 1851.

Statement of Domestic Produce and Manufactures shipped from the port of St. Louis destined to New-Orleans, Natchez, Vicksburg, Memphis, Nashville, Mills' Point, Helena, and other places on the interior waters of the United States, in the year ending 30th June, 1851.

Flour.....	648,520 bbls
".....	2,156 sacks
Wheat.....	112,600 "
Oats.....	416,624 "
Barley.....	17,487 "
Pork.....	108 hhds
".....	5,012 tcs
".....	122,948 bbls
Lard.....	14,980 tcs
".....	47,450 bbls
".....	19,730 kgs
".....	412 tons
Beef.....	5,111 tcs
".....	4,538 bbls
Bacon.....	24,432 cks
".....	6,966 tcs
Hemp.....	57,100 bales
Lead.....	472,438 pigs
".....	78,600 lb. br.
Tobacco.....	9,210 hhds
".....	5,011 bxs
Refined Sugars.....	21,892 bbls
Sugars.....	21,405 hhds
".....	11,548 bbls
Molasses.....	40,510 "
Whiskey.....	29,916 "
Hides.....	38,490
Nails.....	38,776 kgs
Glass.....	6,418 bxs
Salt.....	18,753 bbls
Cotton yarn.....	6,180 bgs
Wrought Iron Manufactures.....	15,345 tons
Castings.....	30,840 "

POPULATION OF AMERICAN CITIES—Based upon the increase of population from 1840 to 1850 in the following cities. Mr. Scott, of New-York, in *Hunt's Merchant Magazine*, makes a table showing

TIME OF DUPLICATION OF AMERICAN CITIES.

Years	Years
Milwaukee..... 3	Indianapolis..... 7½
Chicago..... 3½	Pittsburg..... 8
St. Louis..... 4	Newark, N. J..... 8
Manchester, N. H..... 4	Oswego..... 8
Sandusky City..... 5½	Dayton..... 8
Columbus, O..... 6	New-Albany..... 8
Cleveland..... 6	Buffalo..... 8½
Toledo..... 6	Nashville..... 8½
Cincinnati..... 6	Detroit..... 9
Marietta..... 7	Zanesville..... 9

	Years.		Years.
Louisville.....	9½	Bangor.....	14
Worcester.....	9½	Richmond.....	14½
Madison.....	9½	Troy.....	14½
Syracuse.....	10	Wilmington, Del.....	15
Springfield.....	10	Lancaster, Pa.....	15½
Fall River.....	10	Paterson.....	16
Hartford.....	11½	Bath, Me.....	16
Reading.....	11½	Albany.....	16½
New-York.....	12	York, Pa.....	20
Boston.....	12	Utica.....	24
Washington.....	12	New-Bedford.....	26
Rochester.....	12	Lockport.....	27
Chillicothe.....	12	Schenectady.....	28
Philadelphia.....	12½	Newburyport.....	28
Savannah.....	12½	Norfolk.....	30
Portland.....	12½	Petersburg, Va.....	32
Providence.....	12½	New-Orleans.....	34
Lynn.....	13	Charleston, S.C.....	35
New-Haven.....	13	Portsmouth.....	40
Columbia, S. C.....	13	Salem.....	42
Baltimore.....	18½	Newport, R. I.....	65
Wheeling.....	13½	Natchez.....	85
Lowell.....	14	Poughkeepsie.....	90
Mobile.....	14	Hudson.....	100
New-London.....	14	Carlisle.....	180

GROWTH OF TOWNS IN THE UNITED STATES.

	Years	Pop. in 1800	Pop. in 1850
New-York, with suburbs, had an average duplication of less than 15 years, say.....	14½	63,000	650,000
Albany doubled once in.....	15	5,349	51,000
New-Orleans.....	12	8,000	125,000
Washington.....	13	3,210	40,000
Baltimore.....	21	26,614	170,000
Philadelphia, and suburbs.....	20	73,000	450,000
Boston, and suburbs.....	23	38,000	212,000
Providence.....	23	7,614	41,500
Richmond.....	24	5,637	27,600
Worcester.....	18	2,411	16,000
Lancaster.....	40	4,292	12,500
Charleston.....	45	18,712	43,000
Salem.....	50	9,457	19,000
Alexandria.....	50	4,196	8,800
Cincinnati.....	6½	750	125,000
Pittsburg.....	9	1,565	83,000
St. Louis.....	9½	2,000	80,000
The above cities, together.....	17	273,391	2,154,300
All but the four western.....	30	261,076	1,741,300
The four western.....	8	12,313	413,000
The four largest eastern.....	15½	201,000	1,482,000

NEWSPAPERS, MAGAZINES, &c., PUBLISHED IN U. S.—The statistics of the newspaper press form an interesting feature in the returns of the 7th census. It appears that the whole number of newspapers and periodicals in the United States, on the 1st June, 1850, amounted to 2,800. Of these 2,494 were fully returned, 234 had all the facts excepting circulation given, and 72 are estimated for California, the territories, and those that may have been omitted by the Assistant Marshal.

From calculations made on the statistics returned, and estimates where they have been omitted, it appears that the aggregate circulation of those 2,800 papers and periodicals is about 5,000,000, and that the entire number of copies printed annually in the United States amounts to 422,600,000. The following table will show the number of daily, weekly, monthly, and other issues, with the average circulation of each class:

	No.	Circulation.	No. of copies printed an'y.
Dailies.....	350	750,000	235,000,000
Tri-weeklies.....	150	75,000	11,700,000
Semi-weeklies.....	125	80,000	8,320,000
Weeklies.....	2,000	2,675,000	149,500,000
Semi-monthlies.....	60	300,000	7,300,000
Monthlies.....	109	900,000	10,500,000
Quarterlies.....	25	20,000	80,000
	2,800	5,000,000	422,700,000

424 papers are issued in the New-England states, 876 in the middle states, 716 in the southern states, and 784 in the western states.

The average circulation of papers in the United States, 1,785.

There is one publication for every 7,161 free inhabitants in the United States and territories.

STATISTICS OF NEW-YORK.—IMPORTS INTO THE PORT OF NEW-YORK, 1851 AND 1852.

	Jan. 1 to Aug. 31, 1851.	1851.
Brandy, ½ pipes.....	10,843	10,716
“ ¼ casks and bbls.....	25,449	24,666
Coal, tons.....	49,451	37,745
Cochineal, caroons.....	1,107	1,421
Cocon, bags.....	4,725	7,719
Coffee, pkgs.....	445,989	392,210
Cotton, bales.....	397,856	313,890
Duck, bales.....	300	570
“ pieces.....	11,913	6,953
Earthenware, pkgs.....	25,604	28,119
Figs, drums, &c.....	14,314	56,034
Gin, pipes.....	3,162	3,265
Hemp, bales.....	47,063	42,563
“ tons.....	268	774
Hides, bales.....	1,069	919
“ No.....	773,104	666,333
Iron—bar, tons.....	26,096	37,932
“ pig, tons.....	46,390	38,598
“ sheet, &c., bbls.....	372,910	479,490
Indigo, cases.....	1,253	1,614
“ caroons.....	881	666
Lead, pigs.....	268,743	298,264
Molasses, bnds.....	63,964	76,983
“ tierces.....	4,916	5,096
“ bbls.....	31,940	36,632
Olive Oil, casks.....	747	1,336
“ boxes and bskts.....	36,830	10,997
Pepper, bags.....	32,414	2,684
Pimento, bags.....	10,950	9,027
Rags, bales.....	26,899	24,699
Raisins, casks.....	1,894	8,938
“ bxs and frails.....	105,711	149,738
“ drums.....	860	860
Rice, tierces.....	29,910	29,559
Rum, puncheons.....	1,163	996
Salt, bushels.....	1,315,407	1,346,579
Saltpetre, bags.....	29,021	13,244
Sugar, hds.....	157,886	138,092
“ tierces.....	3,330	1,448
“ bbls.....	34,687	31,379
“ boxes.....	163,167	168,036
“ bags.....	59,290	141,277
Spelter, plates.....	54,493	62,418
Tin—Bauca, &c., slabs.....	25,303	18,306
“ Plates, boxes.....	216,152	230,392
Tobacco, hds.....	10,603	9,454
“ bales and caroons.....	24,550	15,434
Wines, butts and pipes.....	1,094	963
“ hds and ½ pipes.....	13,631	11,767
“ ¼ casks.....	28,884	37,328
“ bbls.....	6,607	7,118
“ boxes.....	44,179	63,760
Wool, bales.....	11,767	37,163

EMIGRATION INTO MASSACHUSETTS, 1851.—

The Superintendent of Alien Passengers for the port of Boston, J. B. Munroe, has presented a statement of the foreign emigration, by which we find that the whole number arrived by water in 1850 was..... 30,075
The whole number arrived by land in 1850... 10,786

Total in 1850.....	40,861
In 1851, the number by water was.....	28,319
In 1851, the number by land was.....	16,544
Total in 1851.....	44,863
Being an increase of 1851 over 1850, by land, of.....	5,868
and a decrease, by water, of.....	756
Leaving a total increase of.....	5,112

NATIVE AND FOREIGN POPULATION OF MASSACHUSETTS.—The population of Massachusetts, in 1850, according to the state census, was 994,965. Of this number 200,896 were foreigners, about one half of whom belonged to Boston and to towns within ten miles of that city. The rapid increase of foreigners within the last ten years, and the continual influx to this country from foreign shores, have created fears in many minds for the result of its influence upon the country and its institutions, and have also been made the subject of legislation.

MAY 7 - 1930



